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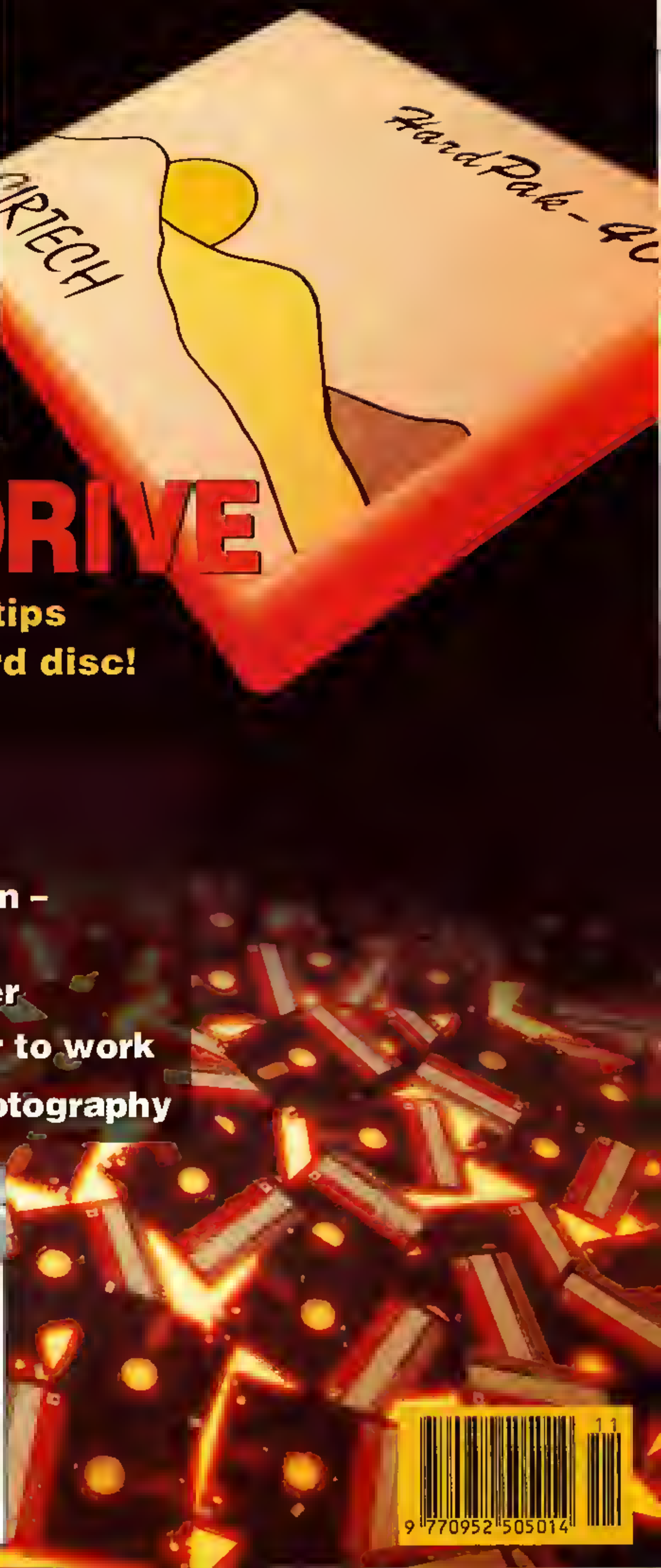
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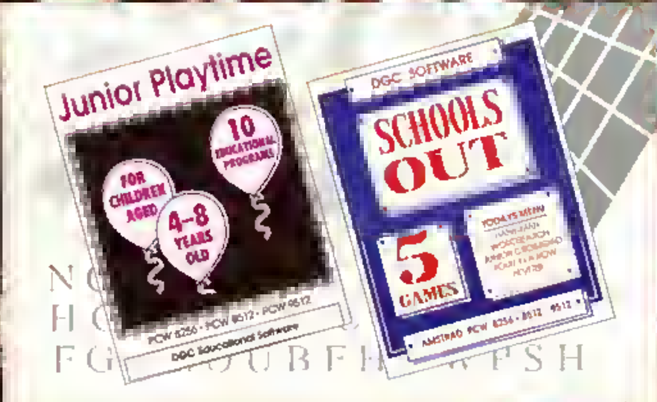
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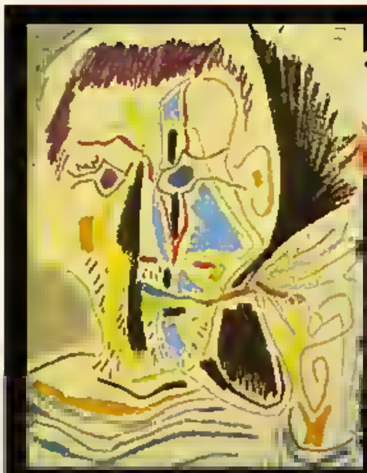

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FUTURE PUBLISHING, BEAUFORD COURT,
30 MONMOUTH STREET, BATH BA1 2BW
TEL • 0225 442244. FAX • 0225 446019

EDITOR Sharon Bradley
STAFF WRITER Sophie Lankenau
TECHNICAL EDITOR Karen Donaghay
ART EDITOR Harriet Athay
DESIGN ASSISTANT Paul Tudor
AD PRODUCTION Deborah Cook
ADVERTISEMENT MANAGER Elaine Brooks
AD SERVICES COORDINATOR Anne Gronow
ASSISTANT PUBLISHER Simon Stansfield
PUBLISHER Kevin Cox

FUTURE PUBLISHING,
THE OLD BARN, SOMERTON,
SOMERSET TA11 7PY.
TEL • 0458 74011

MAIL ORDER QUERIES Kelly Porter
SUBSCRIPTION ENQUIRIES Christine Stacey
TEL • 0458 74011
ART CONTRIBUTORS
ARTWORK Barbara McGavin-Edwards
PRINTER ILLUSTRATION Jeremy Pike
TEL • 0225 429213 •
Jeremy Norton TEL 0272 272085
COLUMN ILLUSTRATION Jolyon Webb
TEL • 0272 317942
COVER PHOTOGRAPHY Tim Frond
TEL • 0272 731209
PHOTOGRAPHY Paul Cox
TEL • 0272 668477
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... The Book

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The book features a large section of tips for easy reference and is well illustrated with screen shots and printouts.

It also includes a section written to help the Locoscript user to 'convert' quickly to Protext.

It is an essential purchase for any current or potential Protext user whatever their word processing experience.

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Protext has been designed as a PC program, not as an imitation of a PCW program and thus complements other PC software much better than Locoscript PC.

Features include justification and centring of any mixture of different printing fonts, including proportional; extensive language support including Eastern European languages; multiple file editing; split screen editing; index and contents; footnotes and newspaper column printing.

For further details please contact Arnor. Protext 5.0 is available for IBM PC and compatibles, Amiga, Atari ST and Acorn Archimedes.

All programs run on PCW8256/8512, 9512, CPC6128

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With rumours of a changing face for the PCW continuing to spread, the release of Cirtech's HardPak might seem, to some, to cast further doubt on the future of the machine. After all, here is a product which, effectively, negates the role of the floppy disc altogether. The HardPak can hold LocoScript and CP/M start of day discs - plus up to 2000 other files in permanent memory, cutting out the need for lengthy loading procedures altogether. Why should the PCW need to call upon its own internal drive(s) to function?

The answer is simple. There is a whole world of new and existing software for the PCW, all of which owes its existence to the floppy disc. What the HardPak will bring to the PCW is extra power, extra speed and extra memory - in short, all of the weapons it needs to make the PC market sit up and take notice. The role of the floppy has never been better defined, in providing ready and plentiful fuel for the HardPak.

Just to prove that the PCW can pack a punch in the power stakes, this month sees the start of a new Micro Design tutorial series, where we show you how to design a corporate image for your company. You will be pleasantly surprised at how easy it is to establish a professional identity from basic raw materials.

We are also taking a look at the role of photography in the plight of the freelance writer. The ability to team up well-written articles with good photographic illustration could provide you with the advantage you need in this very competitive field.

Finally, don't miss out on our educational software competition. We all, it seems, have a lot to learn.

NEWS

by Sophie Lankenau

JOLLY GOOD SHOW?

Low attendance figures at Business Computing 90 show anger PCW exhibitors

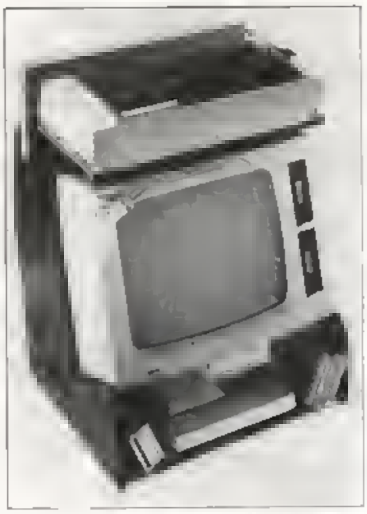
Anger and disappointment have been the reactions from exhibitors at the Business Computing '90 Show held at Earl's Court in September. The PCW village, which contained a handful of exhibitors, was probably better described as a hamlet. Attendance at the show was not at as high a level as organisers Montbuild had hoped - despite a nationwide drop of free tickets. Exhibitors expressed disappointment at the lack of business being done.

However, the quality of representation more than made up for the lack of quantity. Locomotive Software had two stands, and were joined in the PCW 'village' by Creative Technology, SCA Systems, Thurston Techniques, Margin Maker, Derek Rogers Professional Software and Gnome Designs.

Locomotive's 'major new PCW release' did not materialise; the product is still in development, and will not be unveiled until late Autumn. Creative Technology, meanwhile, are rumoured to be working on an updated version of their DTP workhorse Micro Design. Micro Design 2 Plus will come complete with full 24-pin and laser printer support, and should be available soon.

With the lack of new releases from the industry stalwarts, a new product from Gnome Designs enjoyed unexpected attention at the show. The Pa-Ca-Way 8000 is a housing unit designed especially for the PCW 8000 series machine, and is designed to fit the desktop. It includes a special compartment for the printer, and storage space beneath the monitor for 24 floppy discs. There is also a space for paper, which can be modified to house a modem or hard disc.

The Pa-Ca-Way costs just £39.75, and is available from Gnome Designs on (0532) 892549.



Gnome Design's Pa-Ca-Way 8000 – the only new PCW release at the Business Computing 90 Exhibition

ANYTHING YOU CAN DO...

The latest effort to keep this land green amd pleasant comes in the form of a new environmentally friendly ribbon re-inking spray called, excitingly enough, Re-Ink. The CFC-free aerosol will re-ink over 30 printer ribbons, restoring them to a quality which the manufacturers say is 'better than new'.

The spray is applied to the top of the ribbon, and gradually permeates through the fabric. The 'formula' was developed by former research scientist and lecturer Simon Caspell, whose company Lateral Developments are currently marketing the product.

It is hoped that Re-Ink will help combat the waste caused by discarding used printer ribbons. In the UK last year, 26 million ribbons were thrown away. Lateral Developments have worked out that if those ribbons were unravelled and placed end to end, there would be enough fabric to cover the return trip between Land's End and John O'Groats three times over. They've obviously been doing some quite painstaking homework.

The second concern is to save the pockets of computer users. With replacement ribbons costing anything from £3 to £20 each, a £12.95 can of Re-Ink is clearly a more economical choice. Not so for the high street retailers, however. The work done by just one can of the re-inking spray would be worth over £150 in ribbon sales for the dealer.

Re-Ink will be on the market, both in this country and in Europe, in the near future. In the meantime, any enquiries should be directed to Lateral Developments on (0202) 669777.

Lateral Developments' Simon Caspell, the man behind Re-Ink. Each can re-inks over 30 printer ribbons, and costs just £12.95

CHARITABLE CAUSE

If you are involved with a charity which produces regular newsletters, you may be interested to learn that someone has devised a twin-column printing program to help perk up your page layout.

Cornwall-based PCW owner Gerald Lewis devised the program some eighteen months ago, and would now like to offer it free of charge to charities or parish councils. The program is Flipper-compatible, and runs in BASIC with a printout in LocoScript. The idea is that you can mix 'across the page' text with a two-column format, to make the presentation of written work look more lively and interesting. The program will be of great use to anyone producing a newsletter or circular on a regular basis. Because its creator does not want to release it for commercial use, he will only be offering it to charities. On receipt of a blank, formatted disc, and an SAE, Mr Lewis will provide a copy the program free of charge. You must also indicate which machine you are using. Send your discs to 3, Poltair Drive, Penryn, TR10 8NY.

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CHRISTMAS SHOPPING

If the Business Computing 90 Exhibition left PCW owners feeling a little hard done by, there could be some compensation in the form of the forthcoming Computer Shopper 1990 Show.

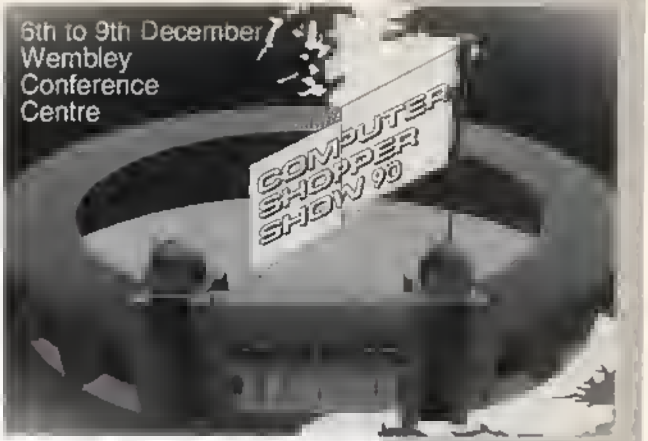
Organised by Blenheim Database Exhibitions, the show will take place at Wembley Conference Centre from 6th - 9th December. The event replaces the Amstrad Christmas Show of previous years, and is being hailed as 'the world's largest PCW event'.

100 of the 280 stands at the show will be occupied by Amstrad-related exhibitors. PCW-specific representation includes Creative Technology, PD experts Advantage, Database Software (of Mini Office infamy), Caspell, Composit Software, Digita International, Hi-Soft and Wight Scientific.

In addition, there will be an Advice Centre on site to give information and guidance on software, hardware and peripherals. Organisers claim that the Computer Shopper Show will be 'the ultimate in shopping sprees for computer-related Christmas presents,' and, what's more, 'Amstrad PCW users will be at the forefront of those reaping the benefits'.

One more good reason to attend the show is that it will be raising money for the Starlight Foundation, the charity set up to grant the wishes of children with terminal diseases.

For ticket information, contact Cape Cowley Associates on (061) 480 9811.



The Computer Shopper 1990; will this one be able to live up to the title of "The world's largest PCW event"?

INQUIRE WITHIN

8000 Plus is looking for a new Editor from the end of this month. The person we're seeking will have plenty of experience of the magazine industry, will be able to identify and satisfy the requirements of the readers, will have an aptitude for desktop publishing and a willingness to work long hours.

As well as this, he or she will have a PCW, a sense of humour, and the ability to field potentially sticky reader calls.

If you are the person we're looking for, please apply in writing (sorry, no phone calls), sending a covering letter, and a copy of your CV stating details of current salary to: Sharon Bradley, Editor, 8000 Plus, Beauford Court, 30 Monmouth Street, Bath, BA1 2BW.

GRAFLINK UPGRADE

Lancashire-based Philosoft have released an upgraded version of Graflink, the link-up package between MasterScan and Micro Design 2. The program enables Micro Design area files to be output directly from the MasterScan scanner.

Graflink 2 allows a complete A4 page to be scanned with MasterScan, and reproduced at resolutions of up to 216 dots per inch. Consequently, large graphics can be transferred from paper on to the Micro Design page without having to split the image into smaller sections and reassemble them later.

The new program supports Logo and all DTP formats, and carries additional facilities to customise scanner drivers to variations of printers. It also allows for the mechanical discrepancies of PCWs with add-ons such as interfaces and hard disc drives.

Graflink 2 is available from Philosoft on (0282) 870197, at a cost of £24.90. If you have the original version of Graflink, you can upgrade to Graflink 2 by returning the master disc to Philosoft, together with £4.95. Address the envelope to: 9, Short Street, Colne, Lancashire BB8 8EP.

Meanwhile, a Somerset company has launched the first four in a series of educationally biased library discs for Micro Design 2. Each disc costs £12.50, but if you send an SAE to Educational Cuts, Crosslets, Churchinford, Taunton TA3 7DW, they will send some examples from the discs so you can see before you buy.

RICH MAN, POOR MAN

Citizen have launched two new printers on to the PCW market. The first is the Citizen Swift 24x, a 24-pin, 136 column dot matrix printer, which is targetted at users who require wide format printing for the output of spreadsheets.

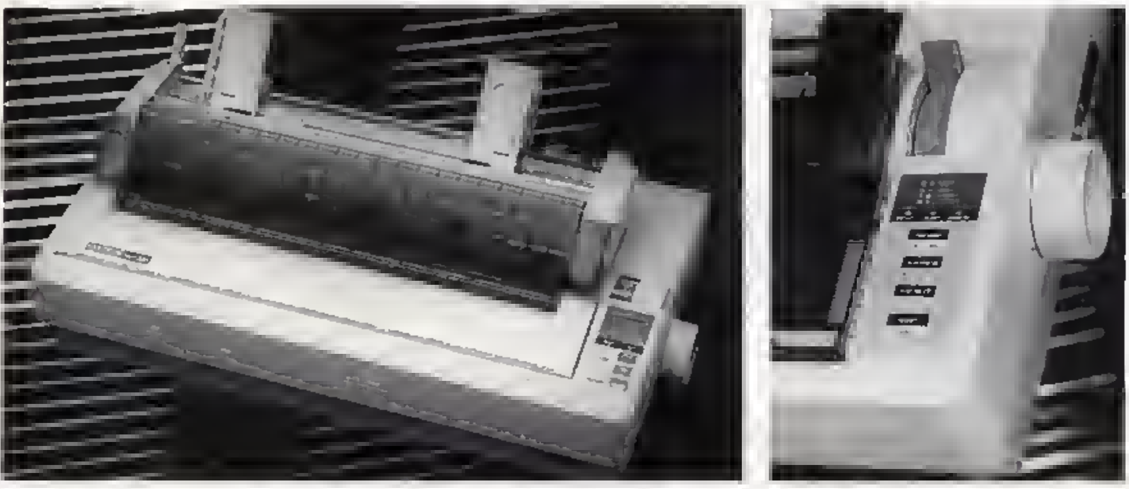
The Swift 24x has Epson emulation, and comes with five built-in fonts. There is also an optional colour kit, which can be installed for £40. The base price for the new printer is a princely £489.

A less hefty outlay can be made by investing in Citizen's second release, the first ever budget 24-pin printer.

The Citizen 124D, claim its manufacturers, is the lowest priced 24-pin printer on the market, retailing at £279 plus VAT. Citizen hope that its release will offer home users and small businesses access to high quality printing without an inflated price to match.

Like the Swift 24x, the Citizen 124D has Epson emulation, and comes with two resident fonts. It is also capable of handling continuous stationery and single sheets at the touch of a button, without the user having to stop and reload when a different kind of paper is required.

Both new releases come with a two year warranty on all parts and labour – including the printhead. Further details can be obtained by telephoning the Citizen product hotline on (0895) 72621.



Two new printers from Citizen UK Ltd. On the left, the Swift 24x, specially designed to output spreadsheets. On the right, the sophisticated control panel of Citizen's new budget 124D 24-pin printer, priced £279.

Oops!

Last month we told you that Mapej, the disc copying experts, had moved to Shropshire. We forgot to tell you their new telephone number. You can now contact Mapej on (0691) 778659.

Cover story

Our thanks go to Compumart for the loan of the 200-odd 3 inch discs featured on this month's cover.

Compumart will be happy to supply you with Amsoft discs - although probably not on a loan basis! A box of ten discs will cost you only £19.90; contact Compumart on (0509) 610444 for more details.

HIGH SOCIETY

The PCW has been seen fraternising in some very high social circles of late. **Best**, the weekly women's magazine, recently voted the PCW 8256 as 'the favourite entry-level word processor' in its round-up of the best personal computers currently on the market. The 9512 was also featured, although somebody at **Best** has been misinformed as to its power. 'The 9512 has double the memory of the popular 8512, and performs at twice the speed,' **Best** get your facts right..

Meanwhile, subscribers to the **Next Directory**, the essential handbook for fashion conscious individuals, will be pleased to see that the PCW has made its mark on high street fashion. Turn to the section on interiors (that's 'items for the home' to you and I), and you will find a PCW 8256 making itself at home in some very swanky surroundings.

However, attention to product detail has once more gone awry. Among the 'additional features' listed is 'an intergral disc drive using 3.5" discs'. Now, we know that Amstrad have got something new up their sleeves, but this catalogue came out months ago. Designer information, perhaps?

Finally, if your PCW is feeling the chill of autumn, why not invest in a friendly Computer Critter to keep the frostbite at bay. Fresh from the American market, the Critters are being distributed by a company called Innovation.

There are two varieties in the species; Bunny Rabbit and Dragon. Both fit snugly around your monitor, with the help of special 'hook and loop fastener strips'. With the creatures installed, you can obscure your screen vision perfectly with the rabbit's fabric teeth or the dragon's outsized tongue.

The colours on offer are guaranteed to put you off your spreadsheet; fluorescent green or pink are par for the Critter course. The price is also likely to upset your pocket, unless you think that £29.95 is a reasonable charge for a heap of lurid polyester. Whatever happened to those transatlantic quarantine laws?

THE WRITE WAY

If you contribute freelance articles to magazines or newspapers, you may be interested to learn that a new handbook is being published to help you perfect areas of technique.

'Guidelines for Correspondents' is a 40-page book, compiled by two senior daily paper journalists with many years' experience behind them. The aim of the book is to offer advice to freelance writers on matters of presentation, the legal considerations in publishing, and the basic formula for writing articles. There is also a section on newswriting, which includes essential advice for potential hacks.

The handbook is inexpensive, and could contain just the kind of information you need to gain the edge in the competitive world of freelance writing.

'Guidelines for Correspondents' costs just £1.90, and is available from Edict Editorial Services, Church Row, Ross-on-Wye, Herefordshire HR9 5HR, telephone (0989) 67707.

COVERED LOVE

Yes, it's still in circulation; Kador's Seal 'n Typa keyboard cover, available for all PCWs at just £10.95

8000 Plus has been deluged of late by enquiries about the continued existence of a plastic keyboard cover for the PCW. We are happy to say that Kador's Seal 'n Type, a polymer keyboard protector, is alive and well and still in circulation.

The cover comes pre-moulded to fit any model in the PCW range of computers. It will provide tight protection against spills, dust, ash and grime, and can be removed for cleaning purposes. The price for a cover for the PCW is £10.95. Contact Kador on (0443) 740281.

CLUB NEWS

HOME FROM HOME

The newly formed Hereford Computer Club – the amalgamation of HAG with HAG IBM – has managed to find a permanent home for its meetings. Due to the rise in club membership, HCC have found spacious accommodation at Holme Lacy College of Agriculture in Hereford.

Alas, comfortable surroundings do not come cheap; with the ever-widening range of facilties which the club offers, an annual subscription has had to be introduced. A mere £8 per year is the charge to be made henceforth by the club. The club runs on a non-profit making basis, and has introduced the subscription in an effort to cover running costs.

Meanwhile, other HCC-sters enjoyed a trip to the Business Computing 90 Show in London last month. They managed to negotiate a discount with Thurston Techniques on their range of products, and even had a chat with Mr LocoScript himself, Howard Fisher ('although,' writes Raymond Cropper, 'he did most of the talking'..).

The HCC-sters enjoyed the trip, but were a bit upset about missing the main attraction. 'ALthough PCWs were scattered everywhere," writes Raymond, "8000 Plus/Future Publishing were nowhere to be seen.." Sorry, boys, we were too busy writing the magazine.

A LAW UNTO ITSELF

If you're a PCW owner in the legal profession, you will be interested to know that a purpose-built club has been formed for your needs. Following an article in the Law Society Gazette about the PCW, its author, legal eagle Keith Simons, has received an enthusiastic response from PCW owning colleagues.

The result is The Lawyer's PCW Club, a 'dedicated' user group, open to all members of the legal profession, including legal executives and legal secretaries. The aims of the club are to meet up with and help less experienced PCW users, and to try to assist in the development of specialist software for the legal profession.

The club will also be providing a newsletter, which will be produced six times a year, containing news, reviews and tutorial series on matters PCW.

If you would like to know more about The Lawyer's PCW Club, and would like an application form to join, contact Keith Simons on (061) 485 2789. Club News would like to hear of any developments in the club's progress!

DON'T BE SHY!

If you turn to page 51 of this month's 8000 Plus, you will see that we've given a whole page over to the PCW Clubs in the United Kingdom. If your club is missing from the list, let us know; write to Club News and tell us about your organisation, however small. Tell us how often you meet, how much it costs to join, where your meetings are held, and what's on the agenda for the near future. We want to know everything about you! There is a reason for this excessive prying. But, in true 8000 Plus tradition, we cannot disclose it until the next issue! It suffices to say, you have nothing to lose – but a great deal to gain – by telling us about yourselves. So, send in that information as soon as possible to Club News, 8000 Plus, 30 Monmouth Street, Bath, Avon BA1 2BW. And, for all those clubs who keep us up to date regularly on their activities, keep those news bulletins coming in.

September Winners

Our congratulations go to the following for providing the correct answers in our September competition: Mr S A Musgrove of Malborough, Wiltshire, Judith Mansfield of Todmorden, Lancashire, and Paul Holloway of Twickenham, Middlesex. The answers are as follows;

1. November 1985
2. September 1987
3. 22 years
4. Fruit and Nut
5. Alan Michael Sugar TRADing.

A copy of Flipper will be on its way to the winners very soon.

Knitty gritty?

If you're keen on knitting and embroidery, and wish that your PCW could lend a hand with your hobby, you could be in luck.

HTB Computers have come up with a new program, called Designer, which allows you to create pattern designs on screen. Up to eight colours, textures and stitch types can be used, and the pattern can either be printed in graphical form, or as a line-by-line listing.

Designer costs £19.95. For more details, contact HTB on (0794) 516279.

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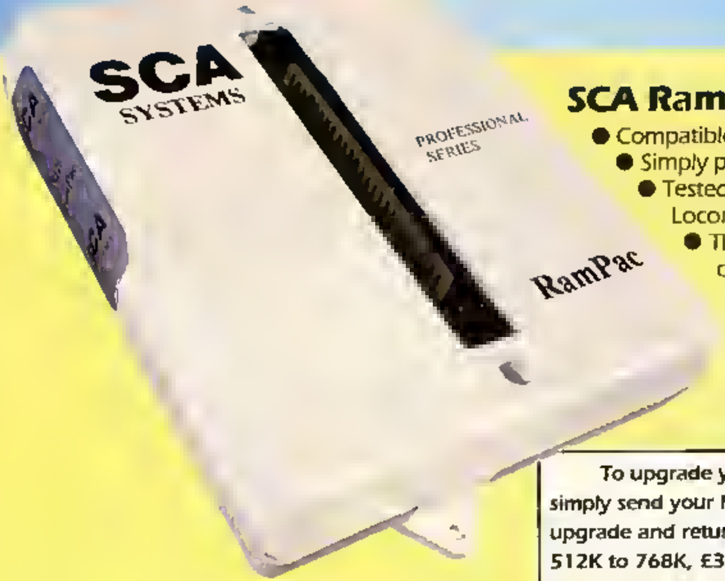

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- Adds 512K of RAM. Instantly!
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  Total £113.85 – postage free.

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- Only £119 + VAT.
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- Three times the memory of basic Rampac for only twice the price!
- Allows Locoscript users to use the maximum 2Mb memory on 8512/9512 machines.
- Flipper 2 recommended for CP/M users.
- Only £199.00 + VAT.
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If you use Locoscript you should have a Rampac– but don't just take our word for it, see what the magazines say–

The Rampac will enhance any PCW and I have no hesitation in endorsing its usefulness.
Amstrad PCW July 1990

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Roll over Picasso

Can you really reproduce the works of Picasso on your PCW?

Karen Donaghay takes the new handscanner out for a roll

What's the damage?
The price for artisitic genius is extremely reasonable these days. The handscanner costs just £179 and is available from Creative Technology on (0889) 567160.

This is an official warning! Before you lay your hands on Creative Technology's new handscanner, be prepared to resign yourself to hours and hours of serious fun. Undeniably fascinating, this handscanner is enough to tempt the most confirmed of workaholics away from their spreadsheets.

ProSCAN is a smooth-rolling, fast-scanning device. A quick roll over any image, whether it is a Picasso or a postage stamp, will reproduce a remarkably good likeness on to your PCW screen. Ten pages into the manual, and you could be scanning everything in sight. Snapshots, cartoons, the cereal packet on your breakfast table – they are all grist to the ProSCAN mill.

You may be forgiven, at this stage, for assuming that ProSCAN is just another expensive toy. This is not so. The potential uses for the handscanner, both serious and otherwise, are enough to make the mind boggle. Creating a company logo, having a personal photograph on your C.V., including an illustration in your next report, or a cartoon in your next newsletter; the list is literally endless.

When we first had a look at the handscanner in the September issue of 8000 Plus, it emerged from the scrutiny of the reviewer's desk with flying colours. This month we show you exactly how to reproduce some of the best pictures in town; armed with a dot matrix printer, the ProSCAN package and, of course, your trusty PCW.

When you hand over your £179 for ProSCAN, the hardware itself (consisting of scanner head and interface) is only half of the story. The other vital ingredient is the ProScan software program, supplied on disc as part of the package. Without it, the handscanner is about as much use as a chocolate teapot.

The setup of this program is well thought out, and easy to use via the menus. It looks very much like Micro Design, a bonus for fans of this desktop publishing program. In fact, although ProSCAN is a self-contained unit, it can work hand in glove with Micro Design (a ProSCAN image can be loaded directly into a Micro Design page). Both were developed by Creative Technology, and the result is a seamless join between the two programs.

Scans-on experience

ProSCAN doesn't just scan in and print images. The extras provided with the program allow you to create a page, complete with titles , labels and a border. For example, text can be entered directly on to a ProSCAN page and a good choice of fonts and typefaces are provided on the disc. Adding lines and boxes can also be achieved without ever leaving the ProSCAN program.

But this is by no means the full repertoire of ProSCAN's tricks. You can emulate the work of the most adventurous plastic surgeon, by making drastic changes to a scanned image of a face or body. You can restore the leaning tower of Pisa to its former glory at the touch of a few buttons. In ProSCAN, virtually anything is possible, with the minimum of effort.

The complete page is shown on the screen immediately after scanning. To look at a small section in greater detail there is an option called View, and at this size you can easily play around with the image by erasing or adding to it. This is where you can really let your creative talents take over. There are spray cans, paintbrushes and a whole range of shades at your disposal.

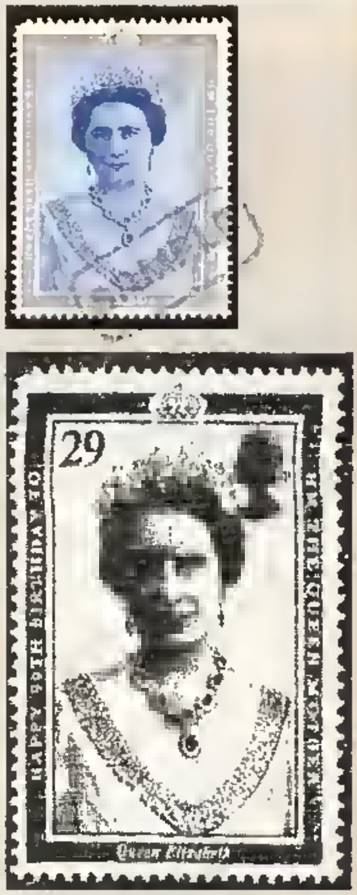
Extra mileage in the fun stakes comes from zooming in on small areas of detail around the scanned image. The zoom option allows you to change things right down at the the pixel level. Pixels, by the way, are not the little people down at the end of the garden, but the little dots that make up an image. Changing things at this level can produce some very convincing results. Dennis Healey look-alikes take note. This could be just the opportunity to trim down those shag-pile eyebrows.

Roll on

When the handscanner first arrives the most common reaction is to try it out on every image you can lay your scans on. Later, when the novelty wears off, it might occur to the zealous user to wonder just what those little buttons on the sides are actually for.

Scanning an image simply involves choosing the Scan option and rolling the scanner slowly over the image. The only button which you should pay attention to at this stage is the one which monitors the brightness control.

The function of this control is self-explanatory. The brightness should be adjusted for every scan to ensure that the image doesn't get lost in a blaze of light or drowned in total darkness. The image appears on screen while you scan, so that changes are easy to make.



How can the handscanner cope with tiny images? We tried scanning in a stamp and even at this size, ProSCAN manages to print out a detailed image

But what about the DPI and dither switches? Well, to start with, if you thought that dithering meant trying to choose between the cheesecake or the chocolate mousse then think again.

The dither switches are all about how to reproduce the grey tones, or shading, in an image. Greys are actually created by putting dots together in different patterns.

The range of dither patterns defies description, and the manual doesn't even bother to try explaining them. There are four settings each of which produces a slightly different effect. By far the best way to get to grips with them is to try them out for yourself.

When scanning in an image, such as a photograph, you will simply find that one of the settings just happens to suit that particular image the best. There are no hard and fast rules – it is a case of trial and error.

Dotty Data

The DPI (or dots per inch) switch, on the other hand, is all about dotty data. The scanner head is four inches in width, so, that is the maximum size of an individual scan from an image on the page in front of you. However, the same image can be portrayed in a variety of sizes on the ProSCAN page. This is all achieved via the DPI switch.

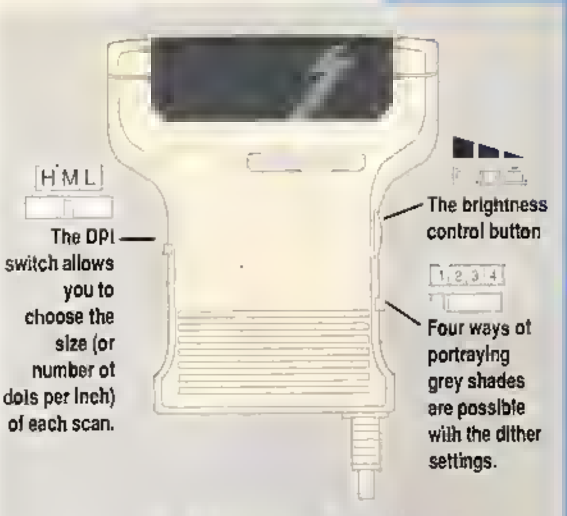
In simple terms, the scanner works by shining a light on to the page. The reflection is then translated into a series of dots which make up the image. If the image is scanned in at 200 DPI (the lowest setting on the switch) then one inch of the original image will be the equivalent of 200 dots on the ProScan page. At higher settings, 300 or 400 DPI, the same scan will produce a larger image on the page.

Speaking of sizes, what about the originals? How big or small can they be? Is ProSCAN limited to images less than four inches wide? To find out how well the program copes with larger images we took a copy of a Picasso print, which was too wide to be captured on one scan.

With ProSCAN, if an image is more than four inches wide, you simply scan one 'column' and then the next, until the whole image is 'fed' into the machine.

So, to capture the whole Picasso print, we scanned it in stages, and then fitted the separate bits together. Although the method is successful, it is not ideal, unless you are extremely patient. Fitting the pieces, or columns, together is a very fiddly task.

Once the pieces were reassembled into one image, we noticed a small shadow along the join. Fortunately, the editing facility came to the rescue here. The shadow was deleted in no time with the help of the white spray can facility. The finished result is not likely to fool any art critics but, as that was never the intention, we think that the ProSCAN performance was convincing enough for our purposes.



The DPI switch allows you to choose the size (or number of dots per inch) of each scan.

The brightness control button

Four ways of portraying grey shades are possible with the dither settings.

The scanner itself is simply rolled over the image to reproduce it on the ProSCAN page.

At the other end of the scale, even a postage stamp was not small enough to escape our all encompassing ProSCAN test. ProSCAN managed to produce a suprisingly good image, considering the size of the original.

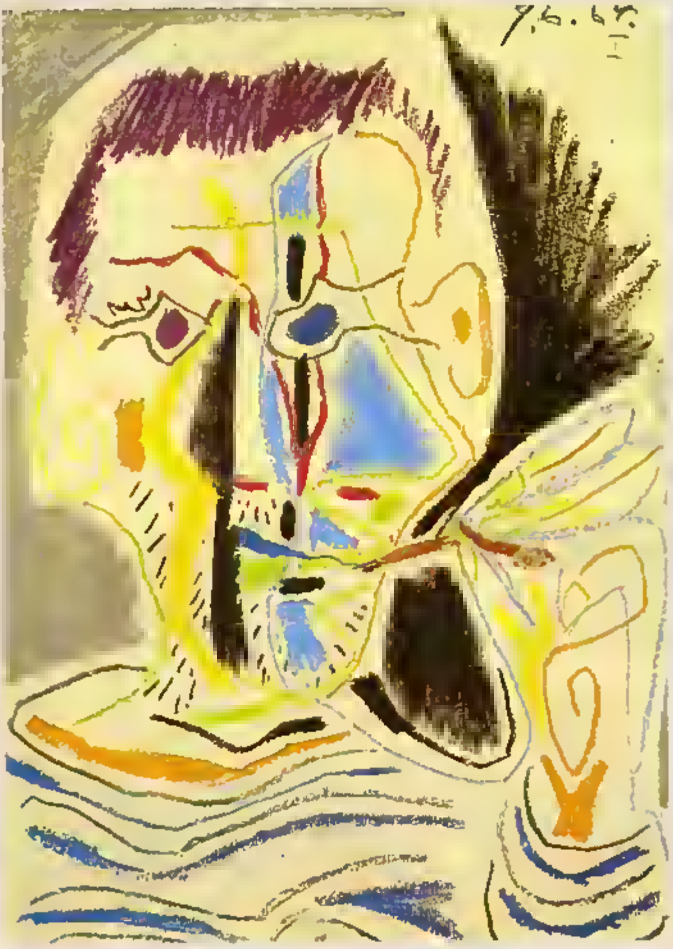
So much for size. The most important test, for us - and for the home user - is undoubtedly quality. We took three types of image - a photograph, a line drawing and an illustration - and scanned them in.

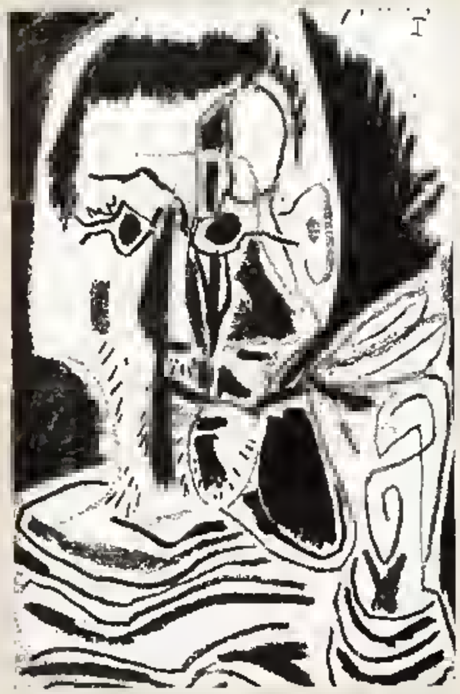
They were printed out on a standard PCW dot matrix printer and the results can be seen over the page. ➤

Power to the printers

The ProSCAN package includes a whole range of printer options so that you can print out on to an HP DeskJet, a laser or a 24-pin dot matrix printer.

All pictures, great and small.

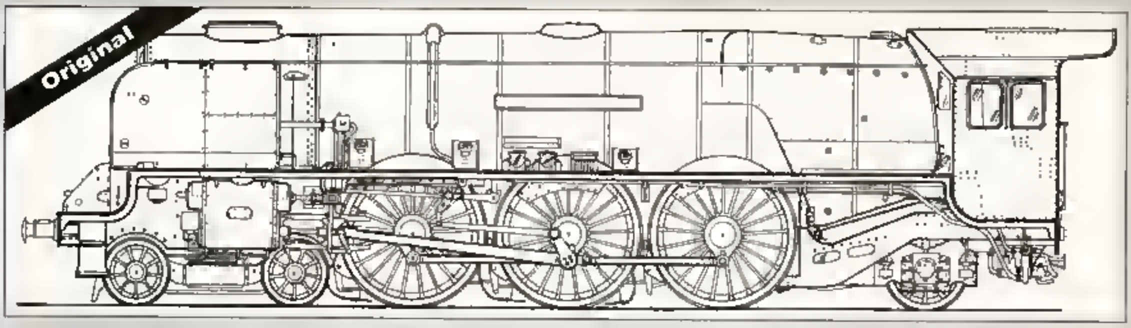




From the little to the large - this Picasso print is twice as wide as the handscanner itself, but that's not enough to stop ProSCAN in its tracks. It produces its own version of the artist's work by scanning the picture in two strips.

They are then joined together on the ProSCAN page by some clever mousework and a lot of patience. The Smoker by Picasso is seen here, courtesy of the fine brushwork of our PCW dot-matrix printer.

The results



Line Drawings

Proscan takes to line drawings like a duck to water. There are no grey areas for the scanner to worry about, just a clear cut distinction between the black lines and the white background. This detailed drawing of a steam train is perfect fodder for the ProSCAN package. As you can see it produces a superbly clear result.

Scanning in a line drawing couldn't be easier as there are no grey areas to worry about. This means that there is no need to 'fine-tune' the brightness control. Similarly, there is

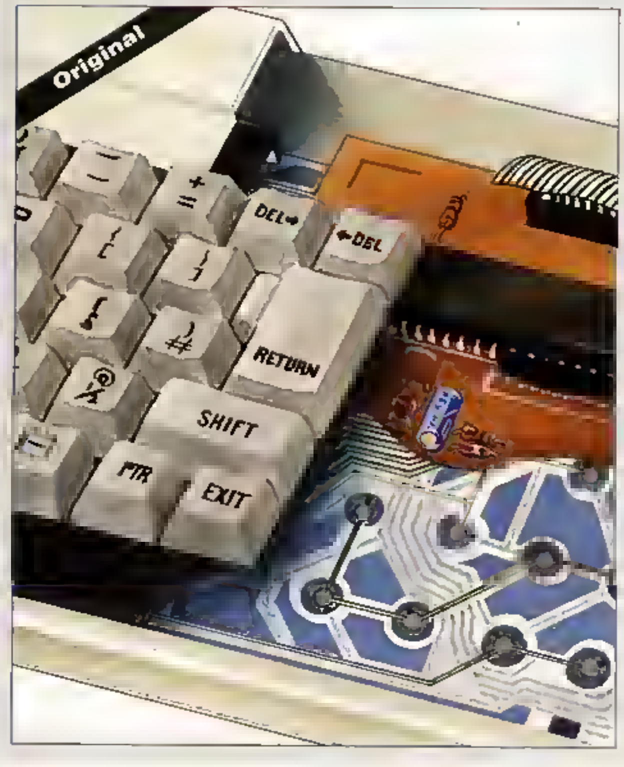
Photographs

Photographs are the ultimate test for ProSCAN. As they are more sophisticated than any other type of image, the scanner needs to be adjusted carefully, to get the best possible result.

The portrait we used has just the right degree of contrast for ProSCAN. There is detail and texture in the picture, and the important areas are neither too light nor too dark.

Scanning this picture in was a case of setting the brightness control to the correct level, so that the different shades of grey in the picture were shown to maximum effect. Experimenting with the dither switch, which controls the way that ProSCAN handles the greys, was also a crucial part of obtaining a clear printed image.

Setting the dither switch to four gave the most realistic effect. The third setting made the image look digitised and the first two did not give a wide enough range of grey shading. The image was scanned in using the Medium setting on the handscanner (300 DPI). It was then printed out on an A4 page .



Illustrations

The clean lines of this illustration were well picked out by the scanner. The picture is a 'cut-away' illustration of the PCW keyboard, and the small circuit details were well portrayed.

To scan in a section of the keyboard we used the 400 DPI setting (labelled 'High' on the scanner switch). This gave a detailed picture of the keyboard.

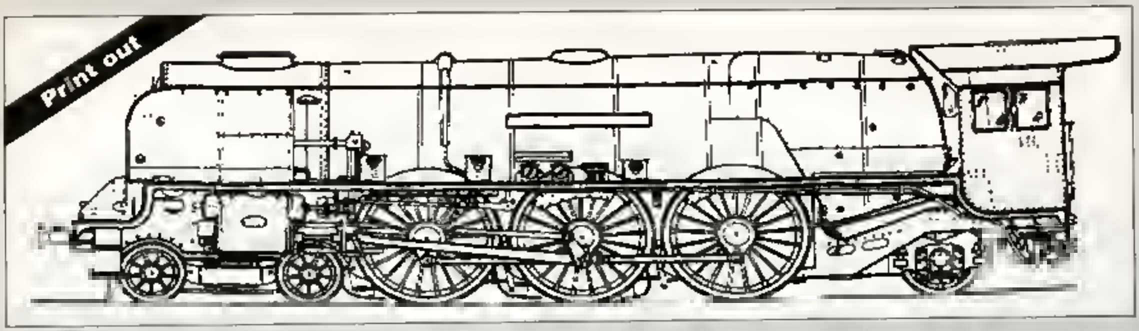
It would be equally possible to scan in the complete image, by setting the switch to 'medium'. The scanner would then be rolled lengthways along the image to fit it on to an A4 page.

To clarify the illustration, it was labelled, and given a title, without leaving the ProSCAN program. The lines pointing to the circuit board and the plastic sensor sheet were drawn using the 'Line' option. The text was entered using the 'Write' operation, and two different sizes of Times font. These were loaded in from the reverse side of the ProSCAN disc. Any text entered into the picture is written in the most recently loaded font. To print the heading on a black background, we first boxed it off using the option Block..UNIT, and then the 'Invert' option was chosen.

Incidentally if you are wondering where we found this fine picture of the PCW keyboard, the answer is .. in our very own pages. It featured in the August issue of 8000 Plus.

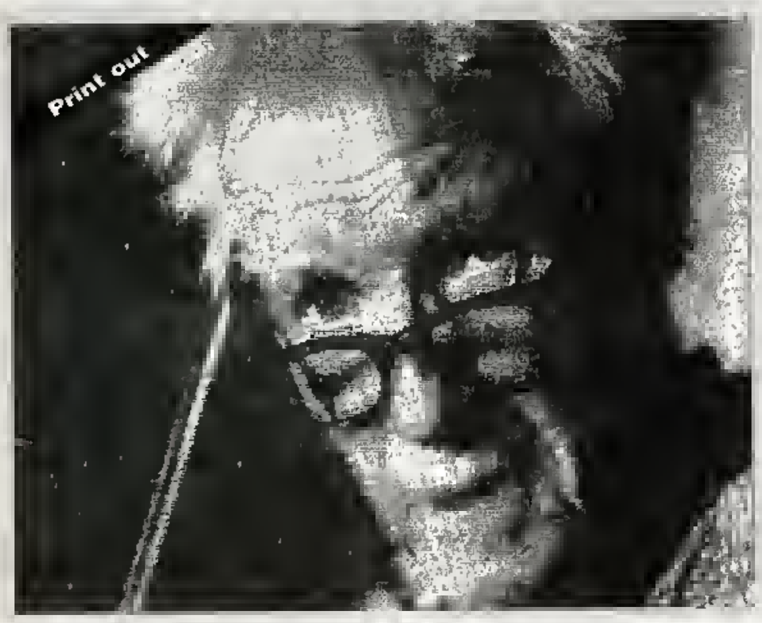
Roller coaster

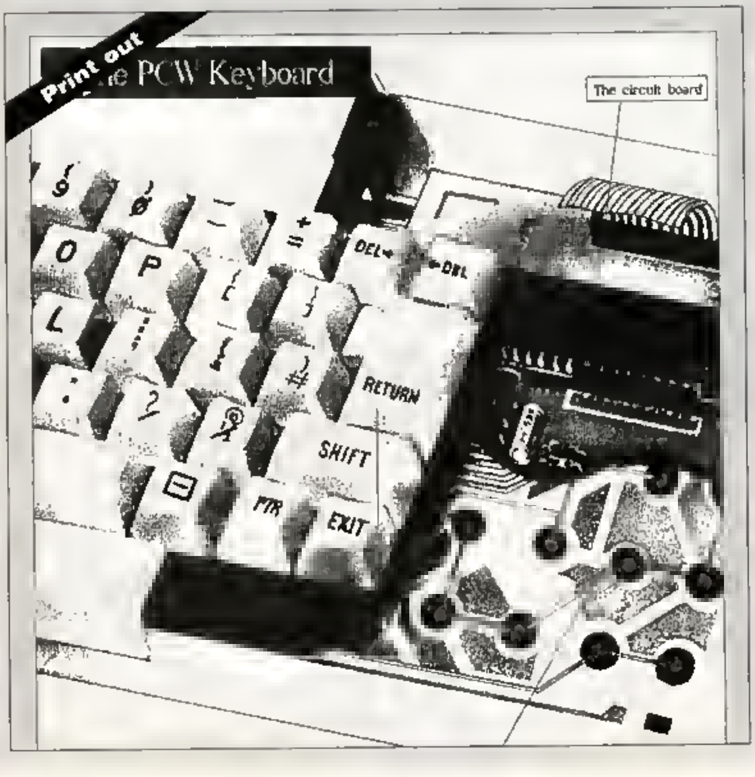
It doesn't matter if an image which you want to be scanned in has an uneven surface. All you have to do is to place a sheet of glass over the image and then scan over it as usual.



nothing to be gained from using different dither settings as it will make no difference to a two-tone picture.

The steam train was scanned in at a low resolution setting (200 DPI) onto an A4 page on its side (or 'landscape' if you want to impress photographers at parties). The upper and lower parts of the page were scanned in separately, since one scan at 200 DPI only covers half of a ProSCAN page. Incidentally, for the train buffs out there, this drawing is of a Stanier Duchess steam train, Class 4-6-2 from the good ol' days of 1938.





The final word

There seems to be very little that ProSCAN cannot cope with. In the process of testing out this program, we encountered all kinds of pictures and ProSCAN churned out a good likeness for all of them, although some pictures, it is true, produce better results than others.

Experience is certainly a factor when it comes to getting the best results but the nice thing about ProSCAN is that the subtleties can be mastered gradually. You can start producing good pictures almost as soon as you pick the scanner up. The way ProSCAN dealt with photographs and line drawings was particularly impressive in our tests.

The little extras which come with the program, such as the ability to add lines and text all help make it a pleasure to use, as does the general good design of the program. There is a choice of fonts available; the Times and Helvetica typefaces come in a variety of sizes and there are three other typefaces available.

The compatability with Micro Design means that you can load a ProSCAN image into a page that has been laid out using this well-known DTP program. However, it is a stand-alone program and the results opposite were produced and printed out by the use of the ProSCAN package on its own.

The only limiting factor is that images more than four inches wide are tricky to reproduce, although it is by no means impossible. This aside, ProSCAN has got to be the easiest way of generating images using your PCW. The great thing about a handscanner is that you have an inexhaustible supply of fresh and varied images; all you have to do is look around you. For anything ranging from a company logo to an advertisement, ProSCAN can come to the rescue.

Judging from the amount of interest it managed to generate in our office, this product has an appeal that is hard to beat. With a bit of imagination ProSCAN could revolutionise the way you use your PCW. It is a must for anyone seriously into desktop publishing: we think the results speak for themselves.

Round and about

Of course, scanning does not always have to be in a straight line. Some original effects, such as curvy text, can be achieved by swerving the handscanner while you scan. This is a simple yet effective way to liven up text on, say, a newsletterpage.

Mice Work

Although a mouse is not an essential item for the ProSCAN fan, it is a useful addition. The Kempston or AMX rodents are both perfectly acceptable.

THERE ARE SEVERAL DATABASES FOR THE PCW

LocoFile
The pop-up database for LocoScript 2
LOCOMOTIVE SOFTWARE
FOR THE AMSTRAD PCW 8256/8512
LocoFile
database for LocoScript 2
PCW

But only one for LocoScript

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Blocks Away!

Whether your documents need a trim, a cut or a complete re-style, Protext can come to the rescue in seconds with the use of blocks. Sophie Lankenau shows you how

Protext brings to text manipulation what the internal combustion engine brought to road travel. There is no such thing as a stroll through a document in Protext; instead, everything is done at a rate of knots, making certain other word processors we could mention look like a Robin Reliant with agrophobia. And the key to this dynamic speed? It's all down to blocks.

Before we look at the use of blocks, simple text navigation and editing techniques need to be considered. Protext operates in much the same way as LocoScript where directions on the keyboard are concerned; the [WORD], [PARA], [LINE], [DOC] and [EOL] keys can be used to the same effect as they would be with the PCW's native wordprocessor.

Using the [SHIFT] and [ALT] keys simply reverses the effect of the command, so that [SHIFT] [EOL] delivers you to the left hand end of a line instead of the right, and [ALT] [PARA] takes you to the top rather than the bottom of a paragraph. It is the use of the [ALT] key which gives instant evidence of Protext's ability to carry out manoeuvres at speed. [ALT], used in conjunction with the cursor arrow keys, will send you to the top or the bottom of documents with fearsome speed.

Relay race

During text editing, the format of a paragraph can be disrupted. If, in mid-edit, the text extends beyond the right hand margin, a touch of the [RELAY] key re-formats the document. If you are making changes mid-paragraph, be sure to press the [RELAY] key on the line where the outgrowing occurs; if you do so beneath the first instance of text extension, the command will not take effect for that line.

You can achieve the same effect as the [RELAY] key produces by going into command mode and typing **format**. This is a command which you will need to use if you are reading LocoScript documents (which you have converted into ASCII form). When the text is imported from LocoScript, it spreads beyond the right hand margins, and the paragraph settings are not clear. A quick **format** command rearranges the text into a readable Protext structure.

Protext commands are executed with economy as well as speed. This is something to bear in mind when you are deleting words or characters from a line. Using a combination of the [SHIFT] and [DEL] keys removes complete words at a time, which is not too drastic, but [ALT] [DEL] will wipe out a line in one go. However, there is a safeguard in the form of [ALT] [U], which reinstates the deleted line immediately.

Blocks away!

If you want to handle anything more than a line at a time, you can use the block facility. The term block can apply to single characters, or whole paragraphs of text. Once you have isolated and 'defined' a block, there are

➤

Swap shop

If you are always having to remind yourself of the rule 'I before e except after c' when faced with a word containing the two letters, Protext has a command which can help you make the right decision. By pressing [ALT][A], the program will swap the character which the cursor is at with the one before. [SHIFT][ALT][A] reverses the arrangement.

One at a time...

Although the block facility is a useful one, Protext can only handle one block at a time. Text blocks which are likely to be copied in future work are best stored in permanent memory on your working disc, where they can be imported into text using the merge facility in command mode.

The second opinion

We submitted Protext – and its properties under the spotlight this month – to the scrutiny of a life-long LocoScript devotee, Bath office manager Yvonne Lloyd. How were she and her desktop companion, her PCW 9512, coping with the transition?

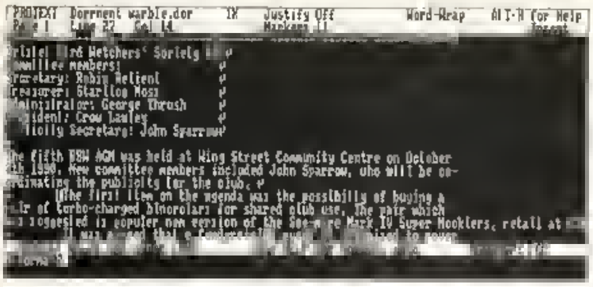
Hitherto confirmed LocoScript devotee Yvonne Lloyd puts Protext's famous text block facilities through their speedy paces

"Many of the Protext editing commands are similar to LocoScript, but I was surprised and delighted with the speed at which the Protext program reacted to the commands I entered. This reaction is truly instantaneous and, upon returning to the familiar LocoScript environment, the tortuous passage to the end of the document page was even more frustrating than it had been previously.

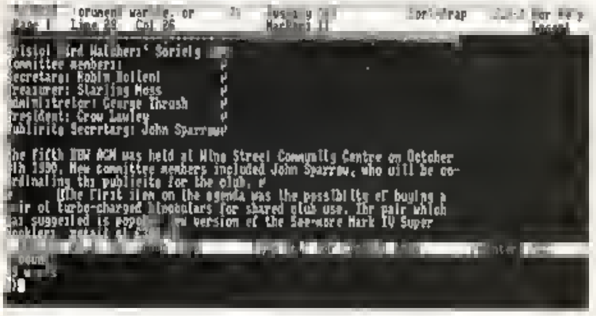
I found the additional editing commands in the Protext program very useful, particularly the ability to delete whole words and lines; I can forsee that the ability to restore the deletions if required could save some grief. Particularly when I am feeling tired or trying to finish some work in a hurry, I find on re-reading the document that I have transposed letters; my favourite Protext facility is its ability to correct this – so 'untie' becomes 'unite' by pressing [ALT]/[A]. Such small details are what makes this program so special.

I missed the automatic relay in the LocoScript program, but feel that pressing the [RELAY] button on occasion is a small price to pay for the extra facilities which Protext offers.

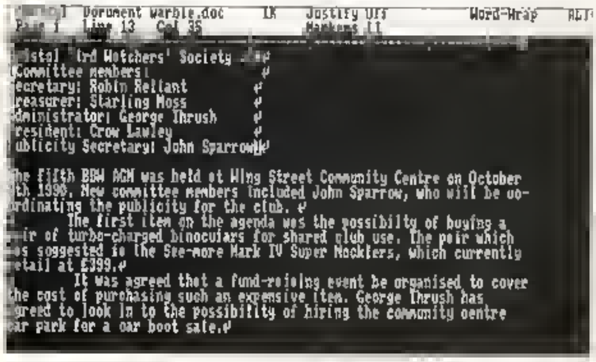
When using blocks of text, speed is the great asset. The commands are simple in that the block to be dealt with is marked at the beginning and the end; it can then be repeated, placed elsewhere in the document or deleted. I was fascinated by the speed with which whole text blocks are deleted and was grateful for the warning on at least one occasion."



If you are editing text in a block and it expands beyond the right margin, go into command mode and enter formatb to rearrange it



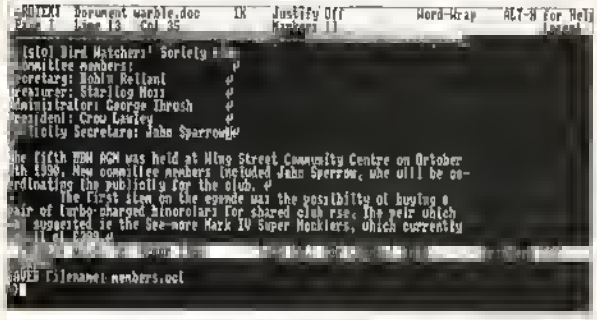
Block text can be counted by typing in countb on the command line



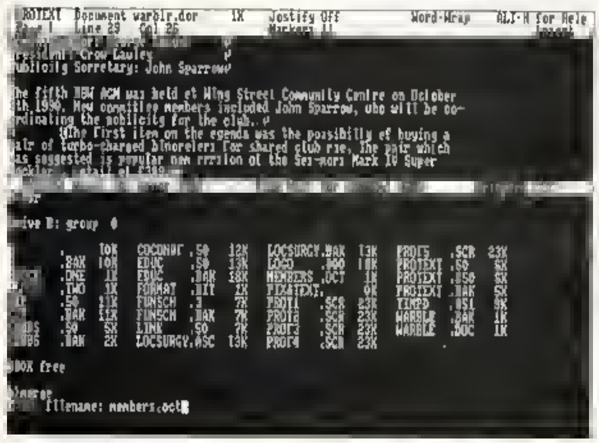
```
      ] Document warble.doc      1K     Justify Off             Word-Wrap    ALT
Page 1   Line 13   Col 35               Markers []
istol  ird Watchers' Society
Committee members:
ecretary: Robin Reliant
reasurer: Starling Moss
dministrator: George Thrush
resident: Crow Lawley
ublicity Secretary: John Sparrow

he fifth BBW AGM was held at Wing Street Community Centre on October
th 1990. New committee members included John Sparrow, who will be co-
rdinating the publicity for the club.
        The first item on the agenda was the possibility of buying a
 ir of turbo-charged binoculars for shared club use. The pair which
 s suggested is the See-more Mark IV Super Hocklers, which currently
etail at £399.
        It was agreed that a fund-raising event be organised to cover
he cost of purchasing such an expensive item. George Thrush has
greed to look in to the possibility of hiring the community centre
ar park for a car boot sale.
```

Copy a block - in this case a list of names and addresses which are likely to be repeated - by marking the block twice with [SHIFT] [COPY]



Saving a copied block into permanent memory for future use



Insert a saved block into a document using the merge command

a number of things which you can do with it. Moving, copying, erasing and counting are just a few examples.

Moving blocks is particularly useful in longer documents such as reports, when you could need to alter the structure as you progress. Juggling with blocks enables you to transport phrases and paragraphs quickly and easily from one location to the next.

To mark out a block, you need to place the cursor at the beginning of the first word of the section which you are intending to move. You then press [SHIFT][+] and a marker, in the form of a square 'open' bracket appears on screen. Now take the cursor to the end of the 'block' and just beyond the last character of the last word there. Repeat the [SHIFT][+] command, and a close bracket marker is installed.

The next step is to find a location for the block. Move through the document using the [PARA] or [PAGE] key (depending how much ground you have to cover), and find the appropriate place for the text. With the cursor at the place where you want the block to be inserted, press [PASTE]. The section of text appears in an instant in the new position, and the space left behind at its original position fills up at the same time.

You can paste in the same block for as long as the markers are in place around the text. If you want to define a new text block for pasting – or for any other function, all you have to do is press [CAN] and the markers are removed.

Copy that

The facility to copy a block can come in handy when certain information needs to be repeated in a document. This could be an address, or a company name – the size and length of the block is irrelevant. This time, when you mark out the block, use [SHIFT][COPY] instead of [SHIFT][+]. At the point in the text where you require the block to be repeated, simply press [COPY] and the text will appear immediately.

The use of blocks is also a great time-saver for the purposes of text deletion. Mark out the block in the usual way ([SHIFT][+]), and then press [CUT] to delete the text. If the block is very long, Protext will ask you whether you are sure you want to cut it permanently; blocks of anything more than about ten sentences cannot be reinstated with the [ALT][U] command.

Always be sure of your actions when it comes to block deletion; this is one area where the speed of Protext, usually its most highly praised feature, can be a little ruthless.

Block text can also be saved into permanent memory. This is useful in the production of regular reports or newsletters, for example, where the same information needs to be repeated each time the document is prepared. This could be a list of committee members, an address or some kind of legal terminology.

Saving it on to a floppy disc means that it can be drafted into a document at any time.

So, to save a text block in this way, mark it out using [SHIFT][+]. Now, go into command mode by pressing the [STOP] key. At the prompt, type in **saveb**. If you leave a space between the last letter of the word **save** and the **b** (which stands for block), Protext will save the whole of your document instead of just the block and rename the file as b. Not really a filename of which you will instantly recognise the contents in the future.

When you've typed in **saveb**, Protext will reply with **saveb filename:**. All you have to do is to name the block, choosing something which will jog your memory when you need to call upon it in the future. You can then insert the block by going into command mode and typing in **merge** at the prompt. You will be asked for the filename of the text to be inserted, which, once given, will be brought in to the document you are working on at the point where the cursor was left.

Out for the count

Protext also allows you to carry out a word count on a specific block of text. With the block marked out, go into command mode by pressing [STOP], and type in **countb** at the prompt. The total number of words in the block is quickly reported back. This could wellcome in handy for the preparation of essays, or for magazine articles, where component sections such as the introduction, main body text and the conclusion are required to be of a certain word length.

The contents of a block when it is marked out can be changed quite easily. All you have to do is move the cursor to the point at which the edit needs to be carried out, and trim or expand as required. The markers will simply move to accommodate any changes.

Protext also provides you with extra text navigation facilities when changes have to be made within a block. Wherever you are in a block, pressing [ALT][1/2][will take you to the beginning of the block, and [ALT][1/2]] to the end.

If you are making changes to block text, it is very likely that it will need to be rearranged as a result. If the content of a block extends beyond the margins of the page on your screen, you can format the text so that it fits. This operation is also carried out in command mode, where you simply type in **formatb**.

When you go back to your document, the text will be back within the parameters of the page. The same effect could also be carried out by pressing the [RELAY] key while the cursor is in the marked block.

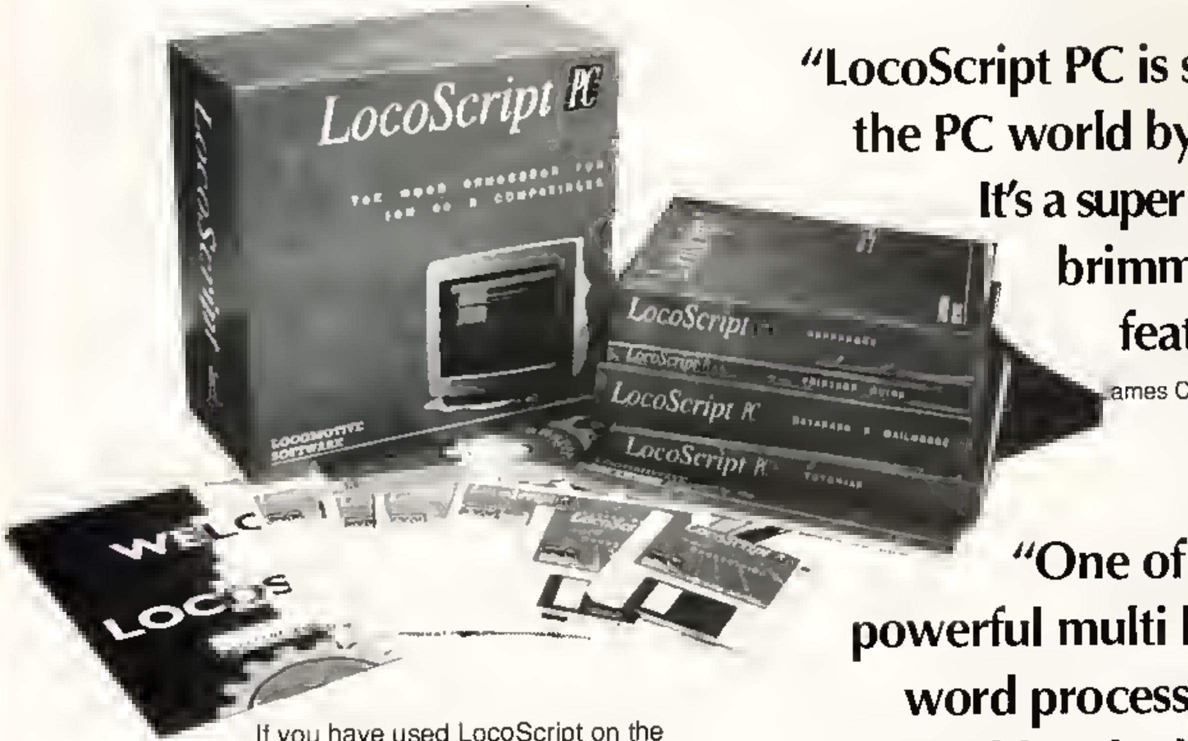
Once you have become accustomed to the effect which using blocks can have on the speed of your work, you will find that you put them to constant use. Next month in our Protext tutorial, we will be taking a look at simple layout techniques. ●

“One of the most important word processing events in a long time”

Rex Last, Popular Computing Weekly, 21 June Issue

“PCW users are going to be delighted with the product”

Steve Patient, PC Plus, August Issue



“LocoScript PC is set to take the PC world by storm. It’s a super package… brimming with features”

ames Clifford, Amstrad PCW Magazine, July Issue

“One of the most powerful multi language word processors in the world… the bargain of the century”

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LocoScript PC runs on any IBM PC compatible with at least 512k RAM, DOS v2.1 or later and one floppy disc drive. All standard display adapters are supported and both 5¼" and 3½" discs are supplied in the package. †Special characters require a graphics adapter and a suitable 24 pin printer.

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see LOCOFILE in wordprocessing

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PRINTING: Specialised software supports almost all 9 & 24 pin printers - there is even support for a Laser printer. "the results are superb." (The Guardian).
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* * TEXT EDITING : TYPESETTING : FONT DESIGN : GRAPHICS : DIAGRAMS : LOGOS * *
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Comprehensive sixty page manual. Complete with demonstration account and prices.

Amstrad PCW 8256, 8512, 9512 **£49-95**

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pcw
TOOLKIT

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Now, **Version 2** is available! Both the program and the manual have been improved to make recovering all of the most common types of damage even easier.

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3.5" Drive 'B' for PCW8256 and PCW9512. Complete with simple-to-fit cables and full instructions. Works with all software.

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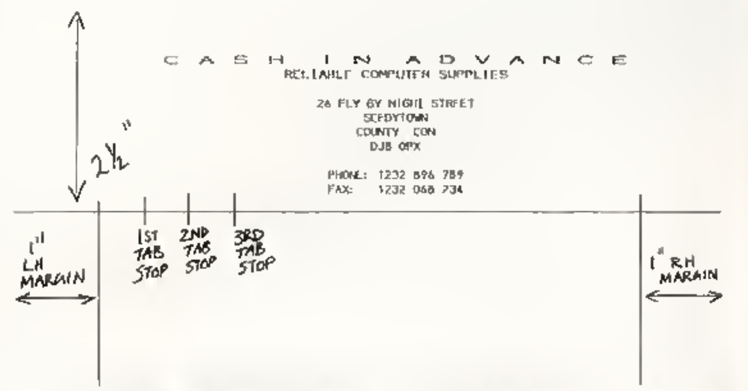
Scriptwriting

In the second of our regular surgeries, Liz Bruce answers your questions on the dos and don'ts of successful LocoScript file management



The old-fashioned 'paper' template; these are exactly the same details that a LocoScript TEMPLATE.STD stores except in a readily reusable form

***Q** Please help! I've read the book, I've read the articles, I've asked computer literate friends and I still don't understand what a Template.STD actually is or does!*

A First of all, please don't worry. this is not at all uncommon and it is not you being stupid; there seems to be something about the whole template business which splits people into two camps. The first lot takes one look at templates, exclaims, "What a wonderful idea!" and grasps the whole thing in one fell swoop; the other 50% seems to find something troubling or deeply obscure in the concept and becomes more and more worried by it.

By now you're probably sick to death of people trying to explain templates to you in terms of the machine, so let's take a different approach. Forget all about computers for the moment and let's look, instead, at how we would type a letter on headed notepaper using a simple typewriter; remember how we've done it so we can reproduce the way we lay out the letter time after time. We could just stick the paper in the typewriter and move it about until it looks about right but that would make it difficult to replicate the result. So we could be a bit more scientific about it, measure out where we want to start and stop and make a note of it.

You end up with what is, in fact, a template in that the instructions on that sheet of paper show you exactly how to position the paper, where to start typing, and where the margins and tabs should be. You can keep this piece of paper with these instructions on it and use it over and over again for each letter you want to type with the same format. It's honestly that simple.

When you make a Template.STD (or standard template) what you are doing is creating an electronic version of that bit of paper. You are effectively storing in the template all the information you have on your by now probably quite scrappy piece of paper, plus other details like the size of the characters, the line spacing and any other details you want. Then you save the template and every time you want to write a letter or document conforming to the same format, all you have to do is create (pressing [C]) the document in the group where the template is stored and all that information will automatically be set up for you. That's all there is to it.

I have found that if I show people a piece of paper which is, in itself, a template, that usually breaks the mystery for them. I hope it does for you. For more information on how templates work with groups, see the next question.

***Q** I've been using my 9512 for a while and have only just started to use anything but the first group on my discs. Now when I create a document on other groups, I get all sorts of weird things appearing on the screen which I have to delete before I can start typing. Why is that?*

A This is another common problem and the answer lies in understanding how the PCW finds a template to display when you create a document. It looks for the specific pattern actually named Template.STD. First it looks in the group where you have just created your document. If it doesn't find one, it looks in the first group of the same disc, then the same group but on drive M, then the first group on drive M - and that's what's causing your problem. You obviously have not set up a Template.STD of your own on your working disc, so the machine looks on drive M.

While you were using the first group on your discs, what appeared on the screen was a template for an A4 sheet, which is the template in group 0 of the M drive, which was fine. However, your start of day disc has other templates on it which are copied to drive M automatically when you start the machine, including those for memos and invoices. If you look at drive M, you will see those templates in the groups with those names.

When you created a document in a group on your working disc which was the equivalent of the invoice group on drive M, you got a template set up for invoicing. The real answer while you're learning, is to set up your own template for each group and name the group accordingly. The template has to be called Template.STD as that's what the machine hunts for; you can't call your template **template.inv** or **invoice .tem** as the machine will not recognise that. So, just by looking at a group with a Template.STD in it, there is no way of telling what that template was set up to do. It could be set up for labels, A5 stationery or continuous envelopes.

What tells you what the template does is the name of the group. So, if you want to set up a template for headed letters, for instance, you would name the group you've put the template in **headlet** or something similar. It is the combination of groups and templates which gives LocoScript it's immense power. Remember, if you ever find yourself doing something twice, you're doing something wrong; so if you have to make changes every time you create a document before you can start typing, you need to either set up or change your template.

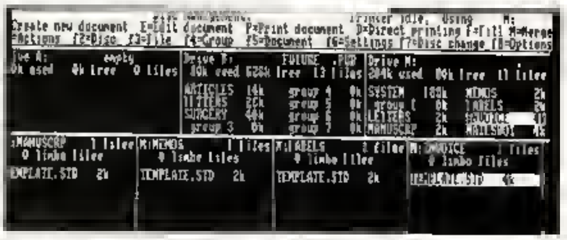
➤

Speaking volumes

Locomotive's LocoScript 2 manual is one of the best manuals around when it comes to PCW software documentation. Everything is clearly explained and well-illustrated. If, on the other hand, you fancy a change in your bedtime reading, try Looking Into LocoScript 2 by Susan Rogers (£14.95) from Prentice Hall (0442 231555) which was reviewed in Issue 26, page 45.

Q I'm writing a long book and I keep my chapters divided among different groups and discs but each document is set up the same way. Do I have to copy the Template.STD into every new group?

A No. The last answer explains why. You could just put the Template.STD in the first group of each disc, or if you are working almost exclusively with the one template, you could put it in the first group actually on the start of day disc and make sure there are no other templates on that disc. Then when you start the machine, the Template.STD will automatically be copied to the first group on drive M and will then be the default template, so that any document created will have the same set-up.


And there they all are: templates for manuscipts, memos, labels and Invoices - one for each group!

By the way, it doesn't mean you can't use other templates, just that you would have to make sure you put a Template.STD in a group where you wanted to do other work and don't forget to name that group so you know what the template is for.

Q Can you give me some tips on how to set up templates? My documents never seem to print out quite as I expect...

A Actually, I wouldn't worry too much. It is possible to sit down and plan it all out exactly before you start, but even then you'll almost certainly have to make adjustments, partly because we nearly always make mistakes at that stage and partly because, particularly with the 8000 series printers, it's almost impossible to position the paper exactly in the printer.

It's usually easier to set up a template fairly quickly and roughly, print out a sample then make adjustments on the lines of "Well, that tab should be a bit to the left and the right hand margin should be a bit further over."

However, there are a few things worth knowing. The printers work at 6 lines to the inch, so you can measure paper in inches and multiply by 6 to work out what line you want to start printing on, for instance. It's also worth remembering the difference between the pitch you want to use for your printing and scale pitch. LocoScript 1 users won't know what I'm talking about and thereby hangs a tale.

When you set your margins, tabs, and so on, you have to remember you are setting them in characters, not inches. So, if you put your left hand margin at 1.0, and you're working in pitch ten, you have set your margin 10 characters wide at 10 characters to the inch, which is, of course, one inch. If, though, your pitch is 12, you have set the margin to ten 12ths of an inch. To make your margin 1 inch wide you would need to set the margin to 1.2. This causes severe problems to poor old Locoscript 1 users (and is one of the best reasons for abandoning it immediately and getting yourself onto Loco 2!) because if they set up their margins and tabs, and then change the pitch they're working in inside their document, the margins and tabs move too! Nasty.

To get round this, LocoScript 2 uses the idea of scale pitch. You should choose a scale pitch which is the main pitch you intend to work with, then you set up your margins, tabs and so on; then, even though you change pitch inside your document, perhaps to put in headings for example, the margins and tabs will stay in the same place - a great relief!

It's also worth remembering that you can put up to ten stock layouts actually inside your template, which are then all available to you in each document created in that group. So, if you have to work with a lot of quotations, tables, try setting up suitable layouts as stock layouts in your Template.STD. Remember the rule: if you have to do something twice, stop and think why. If you have to keep setting up layouts, why aren't they in the template?

By the way, any document can be turned into a Template.STD simply by changing it's name. So if you've set up a template, then found you had to make several changes when you first used it, rather than go back and make the changes in the template as well, delete the original Template.STD, make a copy of your changed document, delete any text, then rename it Template. STD.

Q I've been trying my hand at setting up templates. When I find they need changes, I go back and change them but the changes aren't in the documents when I edit them. What am I doing wrong?

A Nothing. Most things in word processing work from the point the change is made, forward. This makes perfect sense, as it would be pretty awkward if every time you put something in italics the whole thing from the beginning was also put in italics!

The same goes for changes made in templates. Those documents already created will not be changed: after all, you may not want them to be. However, every new document created will incorporate the changes. If you particularly want a document already created, reformed in the shape of an altered template, this is what you do. Create a new document, which will be set up according to the altered template. Now, using **Insert text** copy your unaltered document into this empty document. It will be reformed according to the new template.

Q I've been trying to set up a template to make it easy to use printed invoices, but I can't get the date high enough on the paper and no matter what I do with the line spacing I can't get the lines for address, invoice number etc. to match the paper.

A Unfortunately, pre-printed forms and word processors do not always work together happily. As I've already mentioned, the PCW printers work at 6 lines to the inch but there is no guarantee that a pre-printed form has been printed to match. That's probably why you can't get things to match up. There is no easy solution. Fiddling with the line pitch can cause even more problems (though you can try but do not do it on your start of day disc), so if it all goes wrong, the printer will return to normal when you reload the system.

You could try setting up the right number of returns in your template, using a line space of 1/2 where necessary to make things fit, rather than a fixed line spacing - then do your best. Sometimes these forms are so difficult the only solution is to use direct printing, but although this is all right if you have a 9512, it's not easy with an 8000 series printer as it is all but impossible to position the paper accurately for the print head.

You could just throw the whole lot out and use the machine to print your invoices, putting the relevant address, VAT number, tabs for descriptions and prices etc. in the template but this is not always an option. If you can't do that, soldier on as best you can but make very sure that no one re-orders the same forms. When you begin to run low, contact your printer and explain the problem and have the form re-designed to match your PCW.

The other problem (not being able to get the date high enough to match the form) is pretty well insolvable, I'm afraid. It's happening because when the printer knows it is using single sheet paper it takes off 6 lines at the top and three at the bottom and does not allow you to type on those. It does this because the printer cannot reliably hold the paper tight enough at the very beginning and very end, and if you did put text on those lines it might not print out straight. If you're desperate, you could try setting up a new paper type for your invoices which decreases this top gap, then try keeping a finger on the paper as it prints that top line. When you order new forms, consider having them made with a tractor feed for continuous use. This lets you use the very top and bottom of each form and means you can print all your invoices out in a batch. Sorry I can't be more encouraging, this is a situation I come across frequently and it's extremely annoying. I just hope you don't have too large a stock of the current forms to plough through!

Inquire within

If you are finding Liz's LocoScript 2 Surgery helpful and would like to see a particular topic covered in future issues of the magazine, please write (not 'phone) to us at LocoScript Surgery, 8000 Plus, 30 Monmouth Street, Bath BA1 2BW. All questions will be printed anonymously, so don't be shy - drop us a line!

From the makers of MicroDesign2 ...

PRO Scan

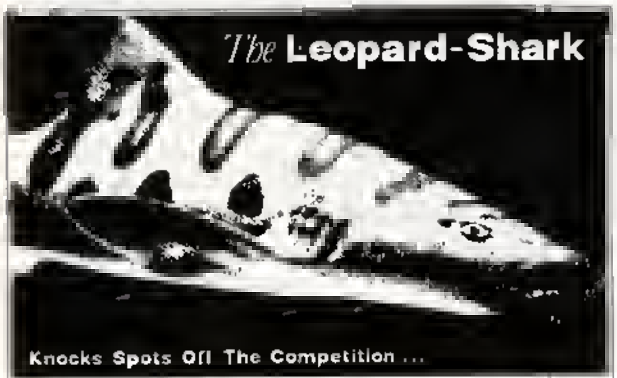
"Creative Technology have triumphed"
8000Plus

The Professional Hand-Held Image Scanner for the PCW

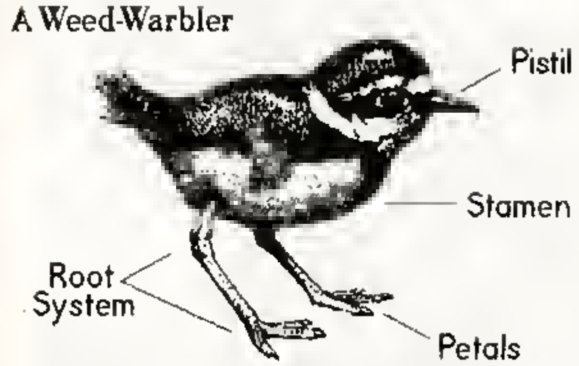
- Works on all PCWs [9512 requires external printer]
- Resolution of 200, 300 or 400 dots-per-inch
- 4 different scanning modes for line-drawings, photographs etc

ProSCAN comes complete with its own stand-alone control program, which includes:

- Image-file compatibility with MicroDesign2, Stop Press, Newsdesk, MasterScan, etc
- High-quality printer driving software which gives the best ever graphics printing on the PCW's own dot-matrix printer. [PCW8256/8512 only]
- Specialised drivers for producing professional-quality printing on 24-pin and laser printers [at 360 and 300 dots per inch respectively].
- Labelling facilities, using the MicroDesign2 Fonts
- Full-page Cut-and-Paste and Image Rescaling
- Comprehensive disc and file management, including disc formatting
- Powerful touching-up facilities, including brush and spray painting in nine different grey-shades
- 80-page User Manual, which includes full installation instructions


The Leopard-Shark
Knocks Spots Off The Competition ...

Scanned from a colour image, lettering added, and printed on a Hewlett-Packard DeskJet PLUS printer.



Scanned from a line drawing, labels added, and printed using the PCW's integral dot-matrix printer.

If you already own an Amstrad FAX, or a hand-held scanner for a different computer, ProSCAN may well be able to use your existing scanning head. If you are interested in buying ProSCAN to use in this way, contact us for more details.

Typeface Library

Three full discs of extra typefaces for MicroDesign2 & ProSCAN, including ...

Baghdad *Calligraphica* Celtic Seraph Schwabacher **GUARDIAN**
Florid Sherwood **BOLDEN** *Scribble* Rondo ... & many more!

MicroDesign2

Although only a year old, MicroDesign2 has rapidly established itself as the market leader in PCW desktop publishing:

'Without doubt, the best desktop publishing package available for the Amstrad PCW' [PCW-World]
'Knocks spots of the competition' [8000-Plus]

MicroDesign2 is also available for the PC - write or phone for details.

MICRODESIGN2 LIBRARIES

The Maps Library [two discs] comprises maps of the world and of the British Isles, including continents, global projections, and overlays for county and national boundaries.
The Parish Magazine library is ideal for MicroDesign2 users who produce a Parish magazine.

ProSCAN	£179.95
Includes SCANNER, INTERFACE & SOFTWARE	
MicroDesign2	£59.95
[Supplied with FREE Extra Fonts Disc No.1]	
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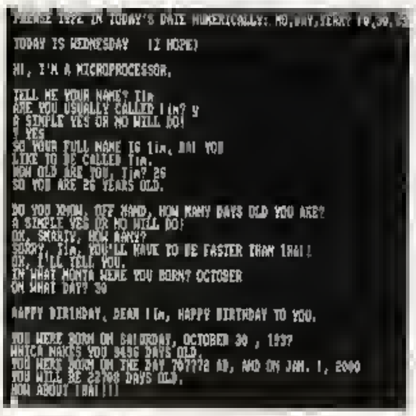
CREATIVE TECHNOLOGY

This advert (except main photograph) was entirely designed and printed AT THIS SCALE using MicroDesign2 and ProSCAN on a PCW8512 with integral dot-matrix and HP DeskJet Plus printers

Public Servant

Tim Smith casts his eye over a collection of desktop utility programs from the Public Domain, which could make the dream of the paperless office come ever closer to reality.

HOROSCOP.BAS



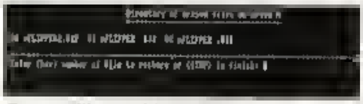
```
PLEASE TYPE IN TODAY'S DATE NUMERICALLY: MO,DAY,YEAR? 10,30,9
TODAY IS WEDNESDAY   (I HOPE)
HI, I'M A MICROPROCESSOR.
TELL ME YOUR NAME? Tim
ARE YOU USUALLY CALLED Tim? y
A SIMPLE YES OR NO WILL DO!
? YES
SO YOUR FULL NAME IS Tim, BUT YOU
LIKE TO BE CALLED Tim.
HOW OLD ARE YOU, Tim? 26
SO YOU ARE 26 YEARS OLD.
DO YOU KNOW, OFF HAND, HOW MANY DAYS OLD YOU ARE?
A SIMPLE YES OR NO WILL DO!
OK, SMARTY, HOW MANY?
SORRY, Tim, YOU'LL HAVE TO BE FASTER THAN THAT!
OK, I'LL TELL YOU.
IN WHAT MONTH WERE YOU BORN? OCTOBER
ON WHAT DAY? 30
HAPPY BIRTHDAY, DEAR Tim, HAPPY BIRTHDAY TO YOU.
YOU WERE BORN ON SATURDAY, OCTOBER 30 , 1937
WHICH MAKES YOU 9496 DAYS OLD.
YOU WERE BORN ON THE DAY 707772 AD, AND ON JAN. 1, 2000
YOU WILL BE 22708 DAYS OLD.
HOW ABOUT THAT!!!
```

It you want to see what the stars hold for you, its probably best not to try this program out

This program really does meet all the requisite criteria for a TV astrologer. it's obsequious, it always gives the same answer, and it is smug.

The coding of this program is not the best in the world. For example, if you fail to use upper case letters in the answer to a question such as "How many days old are you?" you will be met with the rather abrupt reply "Not quick enough", or "I'm sorry you'll have to be faster than that!". It asks your name and then asks if that is what you are usually called; very Russell Grant. At the end of all this frivolity, the program invariably informs you that you are about to meet someone who will change your life shortly after travelling somewhere. True to form, it will wish you a happy birthday if the correct date is entered. So, amusing enough but, essentially, fatuous.

UNERA1.BAS



Restore files accidentally erased from your M: drive with UNERA1.BAS

A handy program which every user should have on a disc somewhere about the house. As its names suggests, UNERA1.BAS and its partner UNERA2.BAS will hopefully stop you ever having to tear your hair out when you have accidently wiped a file from your M: drive. If this irritating situation has never arisen in your PCW career, you might not recognise its use at first. However, there's a first time for everything, and it's worth having a program like this to hand just in case.

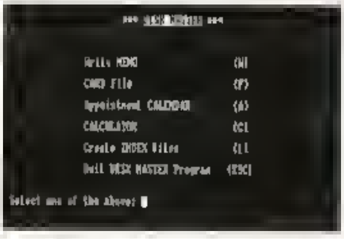
The program looks around the M: drive and seeks out erased files. It then lists these with a hexadecimal code (something like 00E). You enter the code and the file is restored to existence, or un-erased, as the program's name suggests. We tested this with text files and with BASIC.COM, and achieved excellent results both times.

POSTER.BAS

POSTER.BAS; programming at its worst

Why POSTER.BAS was on the disc is a mystery. Not only is it not set up properly to run on a PCW, it is also flawed in its coding. Frankly, it is lazy. It crashed every time we attempted to run it. If tidying up poor programming appeals to you, then POSTER.BAS could be of interest. Unfortunately, this could be its only use; it does not perform the function for which it was intended, which is to print large characters to screen and printer.

DESK.DM.BAS



```
Write MEMO                  (M)
CARD File                   (F)
Appointment CALENDAR        (A)
CALCULATOR                  (C)
Create INDEX Files          (I)
Quit DESK MASTER Program  (ESC)

Select one of the above:
```

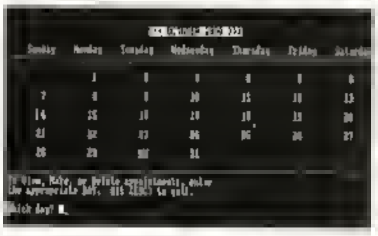
The DESK·DM opening menu offers access to three useful desktop utilities

The files on the Deskmaster disc are run from BASIC. To load them, simply load BASIC and type in RUN at the prompt, followed by the filename - which must be put in quotation marks.

DESK-DM.BAS. is a series of mini programs designed for the desktop. The idea behind the collection was was that the program would reside in the memory of your machine, and would be instantly accessible during the course of your work. The technical name for this kind of thing is a TSR program with the TSR standing for Terminate and Stay Resident.

DESK-DM.BAS provides some very useful facilities. It comes in a menu driven format – but not the pull-down type which you will be used to in LocoScript. This system requires you to enter key letters which take you into the various utilities.

For example, you have an appointments calender. Surprisingly for a BASIC program which uses no machine code it runs very smoothly and very quickly. All you have to do is name the day, the time and a small amount of detail about the activity which you have to carry out. It sounds straightforward, and the good news is that it actually is.



Keep track of your appointments with this easy to use calendar

Along with the appointments calendar comes a fully functional calculator. You can use it to carry out simple additions, subtractions, divisions and multiplications. It can also handle more complex mathe-

HOME.BAS

This is a highly detailed program which shows you how to handle the family finances. You are given the choice of assessing your budgets over four possible periods: weekly, bi-weekly, semi-monthly and monthly. Once you have chosen the period, you are asked how much you earn, how much you're taxed and how much you pay in National Insurance. You then look at 'Paycheck deductions', which include pensions, life assurance, health insurance, and 'other deductions'. Fixed expenses such as mortgage and car insurance all need to be put in. You are then presented with a table culled from the 'Recursive Budgetting Model'. This includes a 'spendable income summary' which details everything you have just entered.

The Recursive budget method is actually the core of this program. What it means is that you are prompted to allocate funds to various criteria until you 'freeze' the account. Once all the accounts have been frozen and you have allocated each one as much money as your budget will allow, the program ends and you are presented with a budgetary table. The accounts include such things as: food, clothing, dry cleaning, barber/beauty, water and electricity telephone, dentist, drugs and sundries, clubs and lodges, theatre and sports and so on.

Next is the 'Budget Refinement phase' in which you get the

THE DESKMASTER

**£5.95 ● Advantage Software
0242 224340**

PRINTMASTER

**£5.95 ● Advantage Software
0242 224340**

This month, we bring you another selection of software from the Public Domain. Under the spotlight are two discs from Cheltenham PD specialists Advantage Software.

The first disc contains a number of short programs which are designed to make the task of organising your files, your household expenses and even your life a good deal easier. They include a home accounts program, a ready reckoner for mortgage repayments and a file recovery utility. On the less serious side there is a horoscope program, and a weather forecaster (not included below). All of these have to run under BASIC

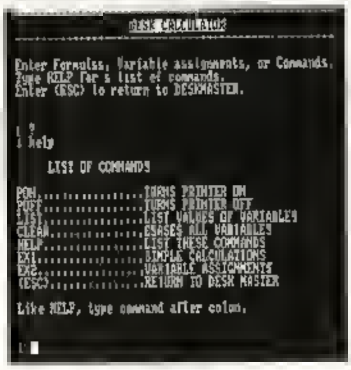
The second disc contains several files which will increase the power of your PCW as a printing device; or that at least is what the publishers claim. It differs from Deskmaster in that it is menu driven - making it a great deal easier to use than most other PD discs.

The programs can be obtained by sending a blank, formatted disc to Advantage at 56, Bath Road, Cheltenham, Gloucester GL53 7HJ.

---

matics, such as assigning variables, and even being able to use hexadecimal numbers. The calculator comes with an on-line help system which details the available commands.

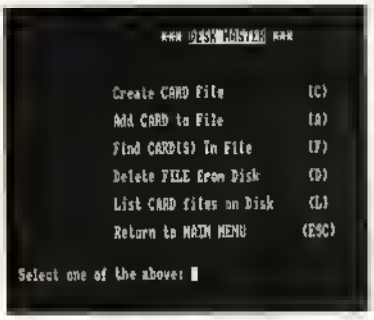
On top of all this, there is also a card index system which allows you to type in anything from phone numbers to cookery menus. The system allows you to create a 'card' (or record) from an option on the main menu. You can go on to add, delete, list or find the cards stored. It is the last option which throws up the one weakness of the program; it has a rather poor search facility. It seems a little strict in the way in which it allows you to find the records which you have stored.



```
                    DESK CALCULATOR
------------------------------------------------------------

Enter Formulas, Variable assignments, or Commands.
Type HELP for a list of commands.
Enter (ESC) to return to DESKMASTER.


: ?
: help

    LIST OF COMMANDS

PON.................TURNS PRINTER ON
POFF................TURNS PRINTER OFF
LIST................LIST VALUES OF VARIABLES
CLEAR...............ERASES ALL VARIABLES
HELP................LIST THESE COMMANDS
EX1.................SIMPLE CALCULATIONS
EX2.................VARIABLE ASSIGNMENTS
(ESC)...............RETURN TO DESK MASTER

Like HELP, type command after colon.

: █
```

A handy desk calculator, which can tackle quite complex mathematics

However, the program is not write-protected and can be viewed. So, if you are acquainted with Mallard BASIC, this means you can try your hand at altering or even improving the program. If you are not able to do this, don't worry; the program can serve as a handy note-taking system, and although smaller than a fully blown database, it is a very useful facility to have at your fingertips.

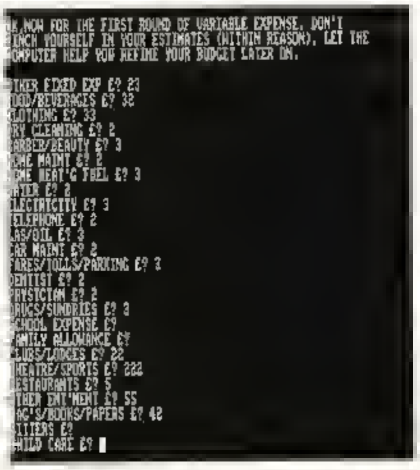


```
                  *** DESK MASTER ***


           Create CARD File              (C)

           Add CARD to File              (A)

           Find CARD(S) In File          (F)

           Delete FILE from Disk         (D)

           List CARD files on Disk       (L)

           Return to MAIN MENU          (ESC)


Select one of the above: █
```

The card index system's menu; smaller than a database, but useful just the same

---

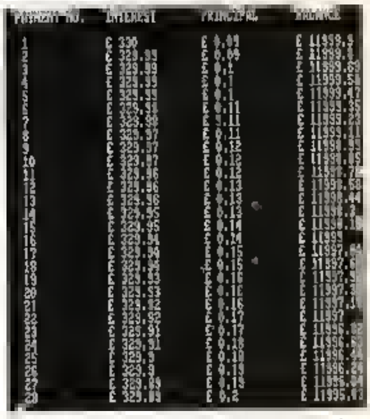
chance to review and revise the accounts in order to reach some state of financial equilibrium. Once all accounts are frozen, you are presented with a final table which gives you a breakdown of incomings and outgoings. The one major problem here is that the table is not presented in simple integer form. You do come across numbers such as 12323·E from time to time, which need to be converted. The program also uses the dollar sign. Aside from this, the program does present you with a highly detailed chart and should be of help.



```
OK,NOW FOR THE FIRST ROUND OF VARIABLE EXPENSE. DON'T
PINCH YOURSELF IN YOUR ESTIMATES (WITHIN REASON). LET THE
COMPUTER HELP YOU REFINE YOUR BUDGET LATER ON.

OTHER FIXED EXP £? 23
FOOD/BEVERAGES £? 32
CLOTHING £? 33
DRY CLEANING £? 2
BARBER/BEAUTY £? 3
HOME MAINT £? 2
HOME HEAT'G FUEL £? 3
WATER £? 2
ELECTRICITY £? 3
TELEPHONE £? 2
GAS/OIL £? 3
CAR MAINT £? 2
FARES/TOLLS/PARKING £? 3
DENTIST £? 2
PHYSICIAN £? 2
DRUGS/SUNDRIES £? 3
SCHOOL EXPENSE £?
FAMILY ALLOWANCE £?
CLUBS/LODGES £? 22
THEATRE/SPORTS £? 222
RESTAURANTS £? 5
OTHER ENT'MENT £? 55
MAG'S/BOOKS/PAPERS £? 42
SITTERS £?
CHILD CARE £? █
```

HOME.BAS helps you sort out your cashflow

LOANAMMOR.BAS



A rough guide to mortgage repayments

This is quite a useful program, from the point of view of topical interest if nothing else. With house prices fluctuating, and banks, building societies and loan organisations vieing to offer mortgages, you would think that a loan ammortisation program would come in very handy indeed. And, for quick reference it most certainly does.

The program asks you to type in the interest rate on your mortgage repayment, the amount of money, how much you are looking to borrow, what length the repayment period is and how many payments you are planning to make over a year. Once the data has been entered, a table appears on screen telling you how much your monthly payment will be. The final payment is shown separately. A useful addition here would be a print-out option to give you something to present to the bank manager. Also, the number of hidden extras and special payments is not taken into consideration. Aside from this, the results you are given do make a reasonable basis to work from -but shouldn't be used by themselves to make important financial commitments.

PRINTMASTER

Create unusual graphics with Printmaster

Side 1 of this excellent disc offers the actual program files, all of which operate from the CP/M A> prompt. Side 2 is stocked with a number of useful fonts such as Times and Scribe, but there are also exotic ones like Utopia, Hampton and Western. You also get a load of borders which go with the printouts, such as Christmas motifs and Frankensteins!

The main program is called up from a SUBMIT file. This reads all the necessary files into the M: drive, so you, the user, simply have to sit back and wait to get going. Once into the program you are faced with the first disappointment; one of the options from the very professional looking menu will only run with a PC compatible which, in its turn, is running with a graphics card. This really should have been left out of the PCW version. Aside from this, and the fact that the program crashed the first time we ran it, it really is worth the money.

You are lead through options to create ornate calendars, greetings cards and banners. The user is guided through the whole program with seamless efficiency and will be able to produce some quite interesting looking material from the PCW's native printer.

The program would attract a wider audience if Advantage had provided a few more printer drivers. For 9512 owners - or anyone else who has had to go out and buy non-standard dot matrix printer to print graphics, there is no suitable driver available on this disc. It would also have been better to remove the graphics editor. However, this is a useful little program, with a good deal of potential.

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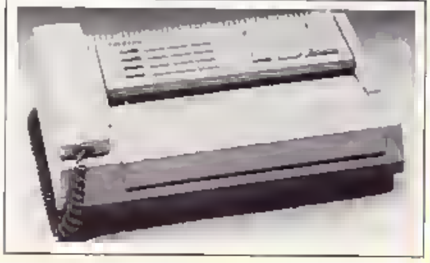

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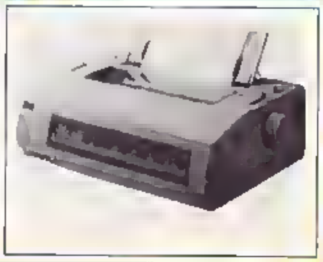

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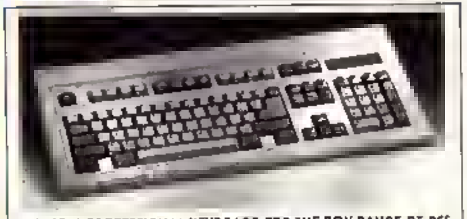

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The Computer Football Pools Predictor

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The result of many years research into the Football Pools by the programmer Martin Evans of C C S, the program is a materpiece of expertise, and is simplicity itself to use

- Predicts Homes, Aways and Draws
- No fiddly typing in of teams names etc and no redundant databases
- Instant read-out or Hardcopy if you have a printer
- Uses scientific formula based on recent form home and away, league position, goals scored etc It has long been realised that certain combinations of these factors return a much higher than average of draws than the laws of average would expect. POOLSMASTER looks for these factors and analyses their significance to give you the best possible chance of a win
- Also has a 'Sequence Predictor' option. Many people believe that certain numbers on the coupon come up more often than others, and over a season patterns do seem to develop The program analyses these patterns and predicts the numbers most likely to come up next Certainly more scientific than sticking a pin in, or family birthdays etc.

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We must however stress, that unless you are experienced in graphology, then we can in no way guarantee the accuracy of the information that the program provides If you are an enthusiastic amateur or just curious, then this program could provide hours of entertainment, whilst teaching you the finer art of this fascinating subject.

The text within THE GRAPHOLOGIST was researched and written by a top London graphologist/criminologist James Woodward. The software was written by Martin Evans our consultant software writer

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Formula One

Loans, percentages or end of term marks - Karen Donaghay helps you figure things out with the aid of the Cracker II spreadsheet

Love them or hate them, numbers rate pretty highly in our everyday lives in all sorts of ways. For a business man, a careful calculation of interest on a loan can make the difference between a struggling business or a successful one. For a teacher, the end of term marks may be partly calculated from term work, and partly from exam results. Whatever the mathmatical details, one thing is for sure: the final marks have to be precise.

This is where a spreadsheet like Cracker II can help. Formulae may bring back memories of schooldays, with a string of algebraic scrawling its way across the blackboard, but it doesn't have to be like that. These are modern times. With the help of Cracker II and your PCW, you may never have to struggle with sums again.

When it comes to calculations – such as percentages and averages – Cracker II is in its element. It can also handle functions such as logarithms, factorials and many others.

So let's go back to the classroom to find out how Cracker can help a beleagered teacher sort out the turmoil of those end of year reports.

Cracker: the facts

Cracker is available from Paperback Software (0245 265017) for the price of £42.61.

Top of the class

What better way for a teacher to keep track of the students' progress than by using Cracker's superb powers of organisation? Goodbye to the old markbook. One Cracker spreadsheet can replace a whole series of marksheets and do much more besides.

First, let's take a look at the most basic of marking routines. The essential information is a list of the students' names, and the marks they gained for each assignment. Nearly every teacher needs to have an overall view of how each student is performing, so the spreadsheet has to calculate the total for each student.

Our example spreadsheet records the trials and tribulations of class 2B. The first three marks relate to their assignments and the totals are worked out in column F, using the SUM command. For example, Billy Smart's total is worked out by entering the formula **SUM(C10...E10)** into cell F10. The result, an admirably high total of 52, is then displayed on screen. A formula is entered in exactly the same way as a number; simply move to the location, type in a fullstop, and then the formula.

It is also useful to know how many marks were available for each assignment. This information is entered at the bottom of the spreadsheet, on line 20.

Full marks

For the average student, end of term is one of the more relaxed times of the year. For the teachers, however, it is a completely different story. Not only do they have exams to mark but, in addition, there are all those end of term reports to write.

At times like this, Cracker can really earn its keep. There isn't a marking book in the world that can automatically work out percentages, or interpret a complicated marking routine.

Imagine, for example, that class 2B have just finished their exams. The exams count for 60% of their final end-of-year marks. The mid-term assignments, however, count for only 40% of their final marks. This can all be calculated by Cracker II .

The exam results are entered into column G and column H, called **Final Results**, is where all of the calculating takes place.The formulae are entered into the column, as shown in the diagram below. They look complicated, but the process is perfectly logical.

40% of the final marks are taken from the assignments. To calculate this, the total mark for the assignments is divided by the total available marks in **F20**. This is then multiplied by 40.

Similarly, the exam mark is divided by one hundred (the total number of marks available) and then multiplied by 60. Add these two results together and you end up with the final mark.

For example, Billy Smart's final mark is calculated using the formula: **((F10/F20*40)+(G10/G20*60))**. (Cracker uses a star to perform multiplications, rather than a cross.)

As you can see, the rest of the formulae in the diagram are based on the same principle. Only the line numbers need to be changed.

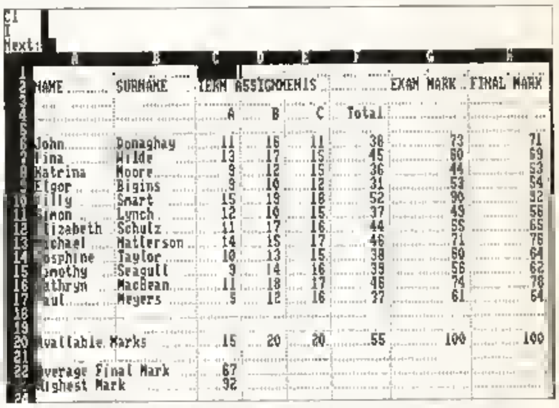
Figure it out

When it comes to typing in formulae, this similarity can speed up the process considerably. The column is first created and defined as numerical (**Integer**) format in the usual way .

The first formula is typed into location H6 in the following way. Press the [.] key, then type in **((F6/F20 * 40) + (G6/G20 * 60)) [RETURN]**. The formula is stored in the box, and only the result is seen on the screen.

Even though the details are all slightly different, the formulae can nonetheless be copied using the Copy function. Place the cursor over the first formula and type in **[C]opy [E]ntry 12 [RETURN] [D]own [RETURN]**. This tells Cracker that you want to copy the contents of this location, twelve times, into the columns beneath. Cracker then asks whether you want to adjust the references.

Pressing [Y]es ensures that ➤



C1
I
Next:

	A	B	C	D	E	F	G	H
1								
2	NAME	SURNAME	TERM ASSIGNMENTS				EXAM MARK	FINAL MARK
3								
4			A	B	C	Total		
5								
6	John	Donaghay	11	16	11	38	73	71
7	ina	Wilde	13	17	15	45	60	69
8	Katreina	Moore	9	12	15	36	44	53
9	Elgor	Bigins	9	10	12	31	53	54
10	illy	Smart	15	19	18	52	90	92
11	imon	Lynch	12	10	15	37	49	56
12	lizabeth	Schulz	11	17	16	44	55	65
13	chael	Matterson	14	15	17	46	71	76
14	osphine	Taylor	10	13	15	38	60	64
15	mothy	Seagull	9	14	16	39	56	62
16	athryn	MacBean	11	18	17	46	74	78
17	aul	Meyers	5	12	16	37	61	64
18								
19								
20	vailable Marks		15	20	20	55	100	100
21								
22	verage Final Mark		67					
23	ighest Mark		92					

The trial and tribulations of Class 2B can be recorded onto this spreadsheet. The final end of term marks are calculated in column G

	H
1	
2	FINAL MARK
3	
4	
5	
6	((F6/F20 * 40) + (G6/G20 * 60))
7	((F7/F20 * 40) + (G7/G20 * 60))
8	((F8/F20 * 40) + (G8/G20 * 60))
9	((F9/F20 * 40) + (G9/G20 * 60))
10	((F10/F20 * 40) + (G10/G20 * 60))
11	((F11/F20 * 40) + (G11/G20 * 60))
12	((F12/F20 * 40) + (G12/G20 * 60))
13	((F13/F20 * 40) + (G13/G20 * 60))
14	((F14/F20 * 40) + (G14/G20 * 60))
15	((F15/F20 * 40) + (G15/G20 * 60))
16	((F16/F20 * 40) + (G16/G20 * 60))
17	((F17/F20 * 40) + (G17/G20 * 60))

These formulae are entered into column H and work, behind the scenes, to calculate all of those end of term marks

Cracker will automatically change all of the line reference details in the formulae. For example, **F6** will become **F7** in line 7, **F8** in line 8, and so on.

Thanks to this handy copying procedure, there are no further changes to be made to the formulae. The result is a whole column of final marks, ready to be transferred onto those report cards.

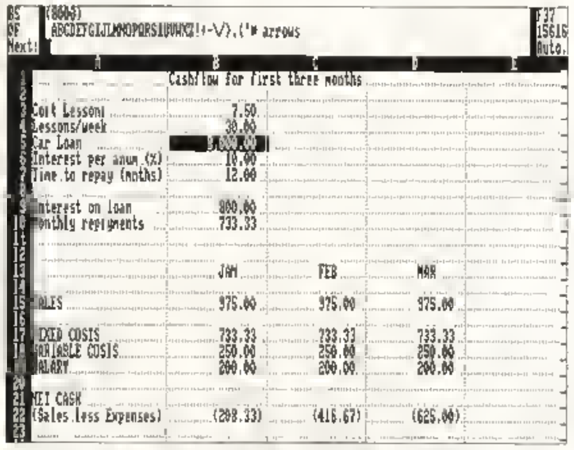
Before those reports go out, however, there are a few finishing touches to add. Information, such as the average mark and the top mark in the class, would be a very useful addition to the spreadsheet.

To find out the average final mark, the formula **AVERAGE (H6...H17)** is entered into **C22**. The maximum mark is found by entering the formula **MAX(H6...H17)** in cell **C23**.

So now, not only does the teacher know exactly what final marks to give to each student but, it is also possible to tell at a glance how an individual student is performing, compared to the rest of the class.

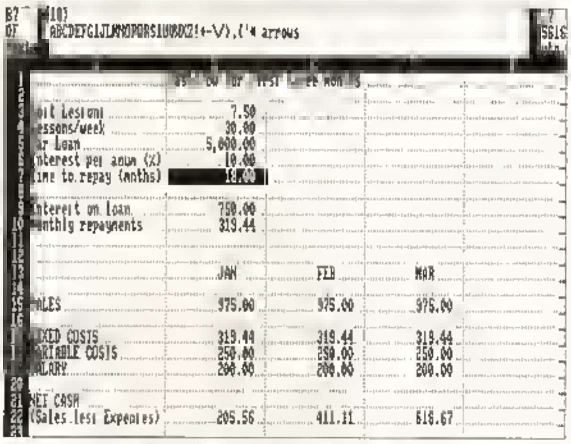
This is a system which can be relied upon, year after year, to work out the sums. However, the classroom is by no means the most typical environment for Cracker. The next example takes a look at how Cracker fares out in the big wide world of high finance.

Cashing in the chips



```
B5    (8000)                                                    F37
OF    ABCDEFGIJLMNOPQRSTUVWXZ!+-\/),('* arrows                  15616
Next:                                                           Auto.
            A                 B             C             D            E
 1                    Cashflow for first three months
 2
 3 Cost Lessons                 7.50
 4 Lessons/week                30.00
 5 Car Loan                 8,000.00
 6 Interest per anum (%)       10.00
 7 Time to repay (mnths)       12.00
 8
 9 Interest on loan           800.00
10 Monthly repayments         733.33
11
12
13                             JAN           FEB           MAR
14
15 SALES                      975.00        975.00        975.00
16
17 FIXED COSTS                733.33        733.33        733.33
18 VARIABLE COSTS             250.00        250.00        250.00
19 SALARY                     200.00        200.00        200.00
20
21 NET CASH
22 (Sales less Expenses)     (208.33)      (416.67)      (625.00)
23
```

This spreadsheet makes it all too clear that the cash supplies are dwindling. Negative numbers are the ones shown in brackets



```
B7    (18)                                                      F37
OF    ABCDEFGIJLMNOPQRSTUVWXZ!+-\/),('* arrows                  15616
 1                     as   ow for  irst   ree mon  s
 2
 3 ost Lessons                  7.50
 4 essons/week                 30.00
 5 ar Loan                  5,000.00
 6 nterest per anum (%)        10.00
 7 ime to repay (mnths)        18.00
 8
 9 nterest on loan            750.00
10 onthly repayments          319.44
11
12
13                             JAN           FEB           MAR
14
15 ALES                       975.00        975.00        975.00
16
17 IXED COSTS                 319.44        319.44        319.44
18 ARIABLE COSTS              250.00        250.00        250.00
19 ALARY                      200.00        200.00        200.00
20
21 NET CASH
22 (Sales less Expenses)      205.56        411.11        616.67
23
```

Cracker II helps the aspiring entrepreneur sort out a solution. A cheaper loan and longer repayment terms could be the answer

The most crucial time for the small business is right at the beginning, in those first few months. For anyone in this situation, a PCW can really make the difference, especially when the spreadsheet Cracker II is on the agenda.

Since most enterprises start out armed with huge amounts of enthusiasm but not alot of cash, the most important question is, will the business survive? There is no better time to enlist the help of a spreadsheet such as Cracker **II**.

Take Mr Cruise, who is just setting up as a driving instructor. At this early stage, he has many important decisions to make. He's seen the car of his dreams, but can he really afford it? How much should he charge his pupils and will he have to work all hours of the day and night, just to make ends meet?

Mr Cruise has the right idea. He has completed a cashflow forecast, using the Cracker II spreadsheet, to estimate where he will be in three months' time (see our first screenshot on this page).

Unfortunately, with an overdraft of £625 accumulated in a mere three months, the outlook doesn't look too bright. What Mr Cruise now has to do is come up with some alternatives, or forget his dream of a small business.

The good thing about his cashflow forecast, is that it allows him to experiment. There are some factors which he can change, such as the repayment time on his loan, and some which he cannot. Take a look at the last screenshot to see how the decisive factors, such as the value of the car loan, or the number of hours worked per week, are incorporated into the forecast.

Have you seen the forecast?

The figures entered into the SALES line are calculated from the figures in **B3** and **B4**. These represent the price per lesson, and the number of lessons per week. (The **<1>**, incidentally, refers to the order of calculation, and is put in automatically by Cracker itself.)

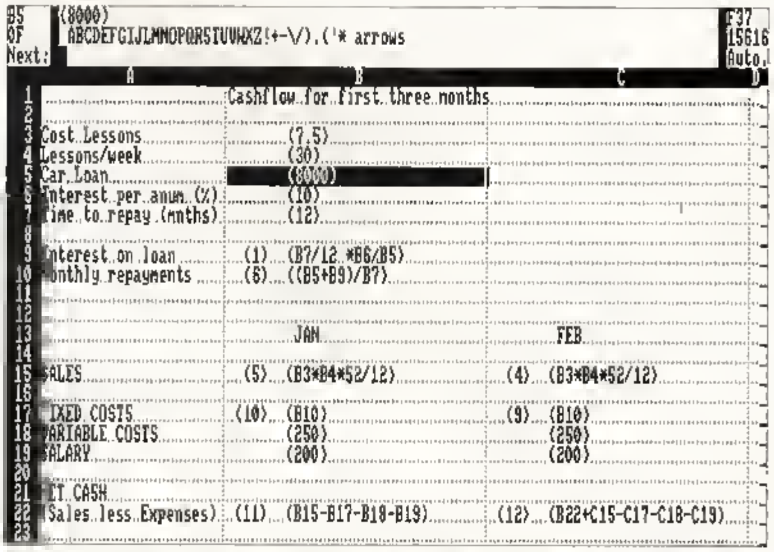
The figures, visible in the line entitled **FIXED COSTS**, represent the monthly repayment of a car loan. This is calculated by adding the original value of the loan to the total interest payable on the loan. This is then divided by the number of monthly payments. The entire calculation is represented by the formula, **(B5+B9) / B7**.

The total interest (given in location **B9**) is calculated using the formula, **B7 / 12 * B6 % B5**. This converts the repayment time from months into years (**B7 / 12**) and then multiplies this by 10% of the original loan, (**B6 % B5**).

So how does this help Mr Cruise? The main advantage is that he is able to forecast the outcome of making some detailed changes. For example, he can instantly assess the benefits of buying a cheaper car, or having a longer repayment period for his loan. He could even try working longer hours, or charging his customers more money.

Sign language

As with most spreadsheets and mail merge programs, Cracker uses the * to denote multiplication and the / stash to signify division.



```
B5    (8000)                                                    F37
OF    ABCDEFGIJLMNOPQRSTUVWXZ!+-\/),('* arrows                  15616
Next:                                                           Auto.
            A                      B                        C           D
 1                     Cashflow.for.first.three.months
 2
 3 Cost.Lessons.................(7.5)
 4 Lessons/week.................(30)
 5 Car.Loan.....................(8000)
 6 Interest.per.anum.(%)........(10)
 7 Time.to.repay.(mnths)........(12)
 8
 9 Interest.on.loan.......(1)...(B7/12.*B6/B5)
10 Monthly.repayments.....(6)...((B5+B9)/B7)
11
12
13                              JAN                       FEB
14
15 SALES..................(5)...(B3*B4*52/12)........(4)...(B3*B4*52/12)
16
17 FIXED.COSTS...........(10)...(B10)................(9)...(B10)
18 VARIABLE.COSTS...............(250)...................(250)
19 SALARY.......................(200)...................(200)
20
21 NET.CASH
22 (Sales.less.Expenses)..(11)...(B15-B17-B18-B19).....(12)...(B22+C15-C17-C18-C19)
23
```

And here is how it all fits together. This cash forecast allows the budding businessman make fine adjustments to his business plans, by splitting up the cashflow into all of its relevant components. They are positioned at the top of the screen for easy access

Sunny spells

Let's try the option of a cheaper car over a longer repayment period. To perform the change, all Mr Cruise needs to do is zoom over to the locations **B5** and **B7** and change the values to **5000** and **18** respectively.

This gives Mr Cruise 18 months to pay back £5000. The second screenshot shows the transformation in Mr Cruise's struggling finances.

Luckily, for our aspiring entrepreneur, this scenario exhibits a steady profit. After three months, there is a total of £600 in his bank balance. This provides a safe profit margin to work within.

Further juggling of the figures could reveal exactly how many lessons Mr Cruise needs per week, in order to break even. In fact, the answer is a mere 24 hours of tutoring. With the help of Cracker II, the forecast comes out bright and sunny, after all. ●

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The essential purchase for your PCW is now even better

The 50,000-selling Mini Office Professional has now been upgraded – and it's better than ever. All the new features of the Plus version are included, apart from the Spelling Checker and Thesaurus modules.

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Code: 5203

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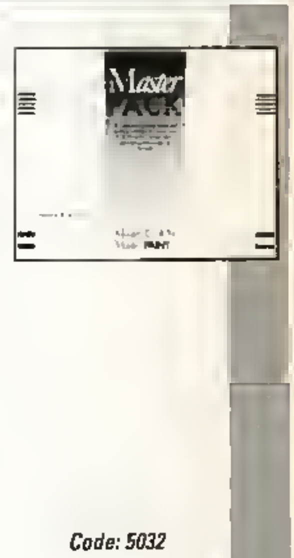

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Data Protection Act

Has losing data ever got your back up? Rob Ainsley looks at a new utility guaranteed to keep those valuable files - and your peace of mind - intact

Get your order in

BACUP (the British Association of Cancer United Patients) can be located at 121-123 Charterhouse Street, London EC1M 6AA. Until such times as their telephone hotline is established, they advise you to write in with your order. Don't forget to state which type of PCW you own. Meanwhile, the associated Dave's Disc Doctor Service (they will rescue data from your corrupted 3" discs) can be contacted on 0892 835974.

Backup

£19.95 ● BACUP Trading Co. (See margin note)

It's anyone's guess as to how many artistic masterpieces have been lost because the author didn't keep a copy. You can imagine a distressed Samuel Taylor Coleridge in 1798 muttering: "Damn! A missing address mark in track 0, and this the only damn LocoScript disc with my Kubla Khan poem on it..."; or perhaps a horrified Franz Schubert thirty years later, realising he's just reformatted the second half of his only disc with the score of his Eighth Symphony...

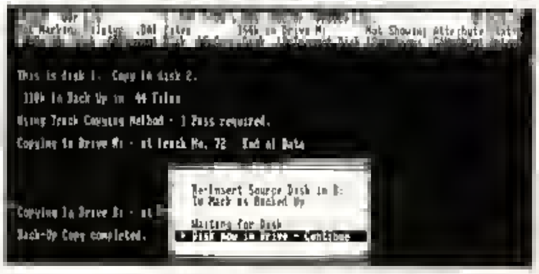
Failure to keep backups – i.e. copies – of your precious data discs will result in disaster sooner or later. Discs can suddenly become unreadable without warning and if you don't have an up-to-date backup, it can mean hours of work down the drain. The prevention is obvious – take new copies of all your important files or discs at the end of each PCW session. The trouble is that, like washing up, it's too easy to not be bothered about doing it.

The finishing touch

You already have a start-of-day disc – the one that runs up LocoScript for you, or CP/M or BASIC or whatever. This program comes on an end-of-day disc, that guides you carefully through the process of making backups. When you've finished for the day, simply reset the machine with [SHIFT[[EXTRA] [EXIT], insert the Backup program disc, and let it do the rest. The team behind it – Dave Smith and company – have for years been rescuing data from people's faulty discs and giving the money to BACUP, the cancer charity. All the profits for this program also go to BACUP, so it's a worthwhile cause produced by a very reliable and experienced team.

Nevertheless, to be worth £20 it has to do a lot more than the backup facilities built into the PCW software you already have. It's a simple matter to keep copies of files using LocoScript's Copy command, [f3] in the disc manager, or even the facility in LocoScript 2 to copy whole discs using [f2]. If you fancy dabbling in CP/M, you can use PIP to copy files and, using a command such as PIP M:=A:*.*[a], copy only files that have been edited since the last use of the command – very handy since you don't have to wait for all the files on the disc to be copied, just the ones that need backing up.

Dammit! Last page of Decline & Fall and I didn't do a back up"...
BANG!
MR GIBBON DECLINE & FALL
FINAL CHAPTER
INPUT
TO BE INPUT



```
This is disk 1. Copy to disk 2.
 110k to Back Up in 44 Files
Using Track Copying Method - 1 Pass required.
Copying to Drive M: - at Track No. 72  End of Data
Copying to Drive B: - at
Back-Up Copy completed.
Re-Insert Source Disk in B:
to Mark as Backed Up
Waiting for Disk
Disk now in Drive - Continue
```

Backup's screens walk you through the whole copying process. Clear, no-nonsense displays inform you of each stage

Rank and file

So what does Backup give you? Well, it's much easier to use than PIP, and works with a LocoScript-like system of key presses ([f1], [f5] and so on) and menus. It will select itself either file-by-file copying, or whole disc copying - whichever is more efficient. You can choose various options such as copying LocoScript limbo files or choosing a two- or three-disc backup system. Only files that have been changed are copied in file-by-file copying.

The program has been well thought out and seems foolproof: you can switch from a two- to a three-disc backup system midstream, for example. Also, unlike DISCKIT or LocoScript's disc copiers, it is impossible to get source and destination discs mixed up (a common cause of ruined discs) because Backup keeps track of which is which.

Menus are clear and procedure is reasonably logical and straightforward. The manual is thorough and comprehensive, if a little daunting at first glance for a beginner, perhaps.

It goes into great detail about the "grandfather-father-son" method of keeping three copies of each data disc, where the grandfather becomes the new son, son becomes father and father becomes grandfather at each end of day session (grandparent-parent-child would be better given the mixed PCW ownership, you would have thought).

The only doubts are whether, at £20, you'll think it worth the investment. This can't really do anything that you can't do yourself in LocoScript or PIP after five minutes with the manual. (It also isn't much use for LocoScript 1 users, as the makers quite openly admit, because Backup can't recognise whether a Loco 1 file has been edited or not since the last backup was made).

It does add some security, though, so if you have had trouble with making copies of discs before or don't feel confident at using PIP or LocoScript 2's [f2] this is for you. It is, after all, a very well constructed and reliable program and is all in a good cause. ●

Backup

Pluses

- ▲ Easy to use
- ▲ Foolproof
- ▲ Can be very good for LocoScript 2 users
- ▲ Good cause

Minuses

- ▼ Does nothing that PIP can't do for free
- ▼ Limited use to LocoScript 1 users
- ▼ Expensive really for what it does

Ease of use	4/5
Documentation	4/5
Features	1/5
Performance	5/5
Value verdict	14/20

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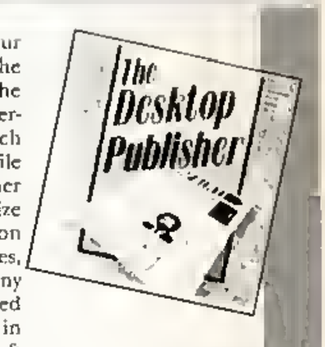

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Print Condition

Keith Pomfret shows you how to prolong the active life of your printer with a simple but effective programme of regular maintenance

Tools of the trade

Tweezers, 1/2 inch bristle paintbrush, vacuuming equipment (either a low-voltage cleaner, or a modified domestic one).

After the keyboard, the printer is the part of the PCW that takes the most consistent hammering. Unlike the keyboard, the parts of the clattery dot matrix printer attached to the 8256 and 8512 receive stressful but constant loads.

The keyboard does not escape lightly either, having to withstand the rigorous treatment of touch (and thump) typists: it is, however, quite a resilient and sturdy beast.

The printer suffers constant stress and strain. It is often required to perform consistently for long periods of time if lengthy reports and documents - or even that first novel - are to be printed out.

It sits alongside the PCW week after week, doing its job without complaint. But like any other mechanical device, it is subject to wear and tear and the effects of dirt and dust.

To be sure that your printer lasts as long as the rest of the PCW and continues to function in fine order, here's a monthly routine that will pep up the printer's performance and guard it against the rigours of everyday usage.

The dot matrix printer is attached to the back of your computer by the ribbon cable and power cable. It is a not a very sophisticated piece of equipment, and there are no complicated electronics to go wrong. It is a simple printing engine and all the intelligent things are handled by the computer. With the lid and ribbon removed, you can see, and indeed, have access to all of its component parts.

If you've had your printer for some time, the inside will probably be coated with a fine film of dust. This occurs with the repetition of the print head hitting the paper. Every time it does, the impact loosens paper dust which steadily accumulates. Excessive buildup inhibits the movement of both the print head and the carriage. The regular removal of such debris will help prolong printer life and prevent the need for costly repairs. The good news is that DIY printer maintenance is easy to do, and requires only a few simple tools.

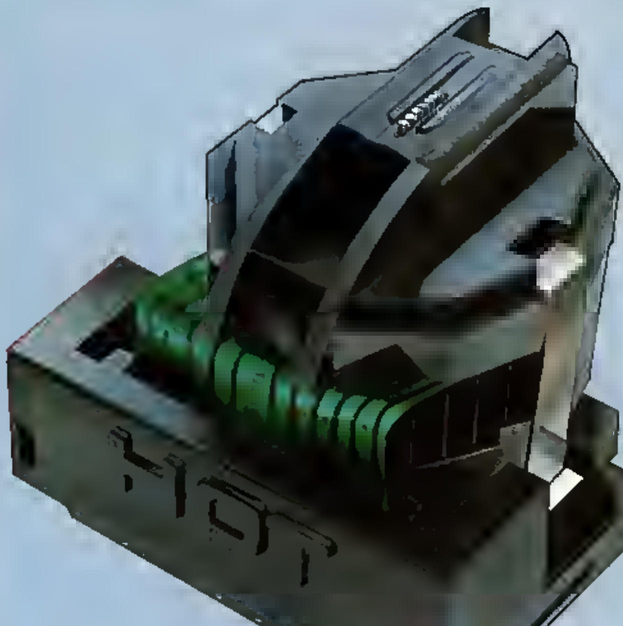
First, a word about the print head. This is the device that sits on a pair of rails, butts up to the paper cylinder and is connected to the frame of the printer by a flexible copper coloured ribbon. It consists of a linear matrix of tiny pins which form characters on the paper by being 'fired' at the ribbon and imprinting a dot of ink on the paper.

It is manufactured to fine tolerances and cannot be serviced in the home. But it is a resilient piece of machinery and, if the rest of the printer is looked after, should perform adequately for all of the printer's working life.

Cleaning costs

Time - fifteen minutes a month; tweezers, £1.10; paintbrush, £2.24; roll of tape, 57p. All the equipment involved can be re-used, so that the total expenditure for a year's printer cleaning comes in at less than £4.00.

Head Start



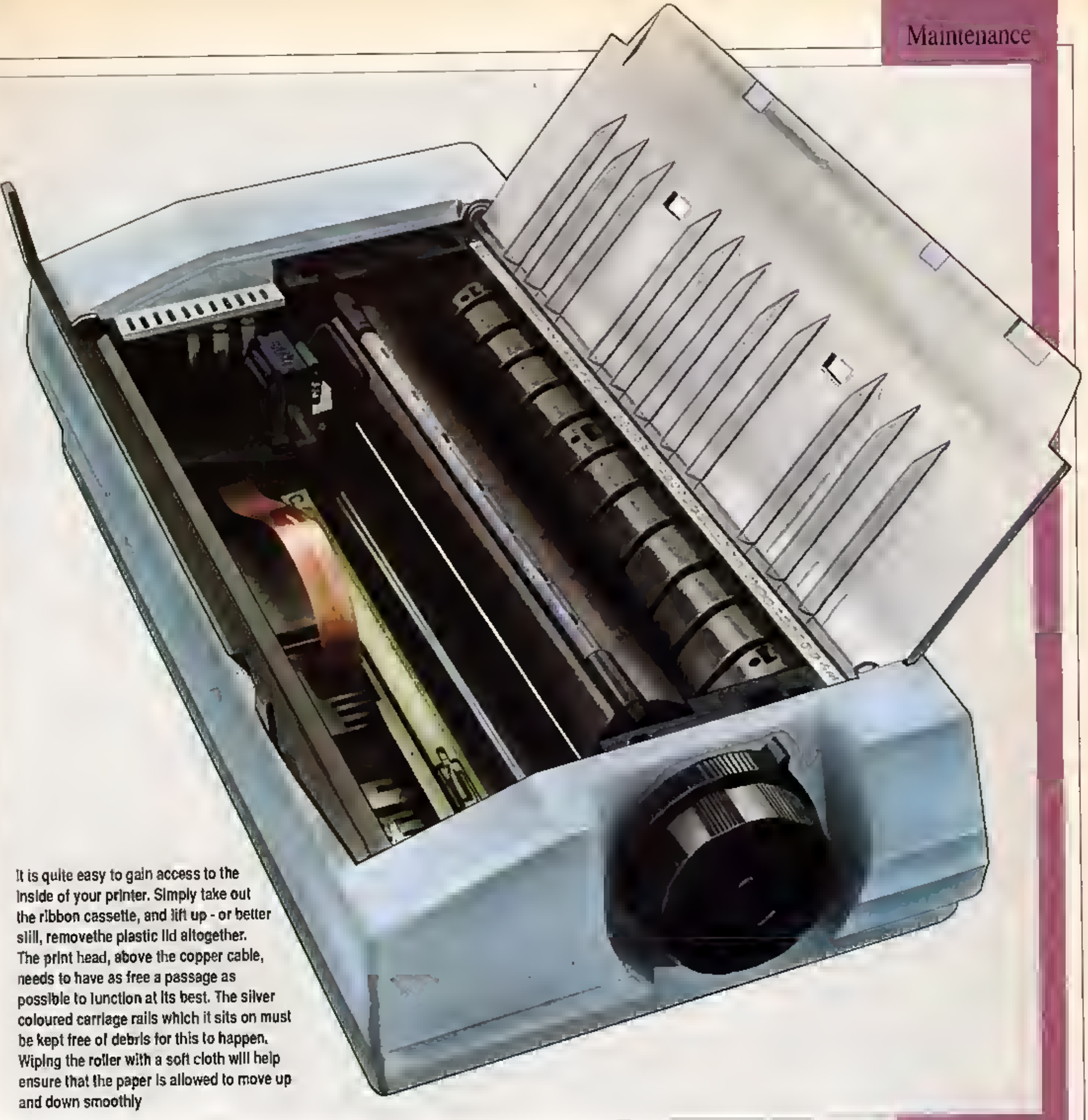
The tiny pins inside the print head are better left in the hands of the experts when it comes to cleaning. However, you can quite safely clean the exterior with a soft cloth and a dab of white spirit. You can also ensure that its life is preserved by taking better care of the other parts of the printer which come into contact with it on a regular basis.

The print head is a robust mechanism. But it cannot stand up indefinitely to maltreatment. So you can ignore hints for re-inking ribbons such as: "Mix one part Fairy Liquid with four parts endorsing ink and stand the printer ribbon in the mix overnight".

That advice was culled straight from the help pages of a computer magazine! In simple terms, the best way to assure the longevity of your printer is to avoid this sort of risk. It can only cost you money in the long run. Use only replacement ribbons, bona-fide re-inking services or, if you want to tackle the job yourself, proper re-inking fluid.

Don't be afraid to ask a re-inking service about their product. Proper printer ink contains pigment to give it colour, a lubricant such as silicon to lubricate the print heads and various other necessary ingredients.

If you had a car that ran on four star, you wouldn't put two star in it. Using one of these supposed money savers would be the equivalent of trying to run it on a mixture of diesel oil, candle wax and coal dust. Imagine what that would do to your engine. Short-cuts to ribbon maintenance have the same effect on your printer.



It is quite easy to gain access to the inside of your printer. Simply take out the ribbon cassette, and lift up - or better still, removethe plastic lid altogether. The print head, above the copper cable, needs to have as free a passage as possible to function at its best. The silver coloured carriage rails which it sits on must be kept free of debris for this to happen. Wiping the roller with a soft cloth will help ensure that the paper is allowed to move up and down smoothly

❶ To gain access to the inside of your printer, remove the lid and take the ribbon cassette out. Put both to one side. Gently slide the print head as far to the left as it will go. Look at the place where the carriage carrying the print head sits on the rails. Any dirt and dust can be removed by using a pair of small tweezers.

❷ Next, slide the print head carriage to the right, paying special attention to the toothed rubberised belt as the print head moves. Again, remove any debris with the tweezers.

❸ Check that the copper ribbon is able to move freely without snagging anything during the left-right travel of the print head. With the print head over to the right of the carriage, check its left hand side for dirt and dust, using the tweezers to remove any significant deposits.

❹ Most of the moving parts on the printer can be freed of grime in the same way. Pay special attention to the areas around the blue adjuster on the right of the, now, parked print head and operate the bail bar to check for any more accumulated debris.

❺ Once you're sure that you've got all the superficial grime, dust the inside using the paintbrush. Always remember to dust away from moving parts. The idea is to remove anything which could gradually build up and block the mechanism.

❻ Once this is done, you can extract the dust using a small low voltage vacuum cleaner, designed for close work of this kind. If you can't get hold of one of these, a slight modification to a domestic vacuum cleaner will have the same effect. Although the suction from a carpet orientated vacuum cleaner is much greater than is needed for a delicate job like this, you can control the level by blocking off the most of the end of the upholstery attachment pipe, and using your hand to carefully cover and uncover the hole.

❼ Another alternative is to use a tacky pad which will pick up dust when it makes contact with the offending surface. You can make one of these by sticking some double sided adhesive tape this around a small sponge (of the sort used for washing up), and gently dabbing it on the dusty areas. The only thing that remains is to put the ribbon back in, the lid back on and mark your diary for the same job next month.

In total, this simple printer maintenance regime takes about fifteen minutes to carry out - a small price to pay for crystal clear output, and extended printer life.

Price and Prejudice

To PC or not to PC? That is the question which most high-flying executives presume they know the answer to. Alec Rae considers the hazards of the costly PC upgrade

Ask anyone what is the best selling point of the Amstrad PCW and they will probably answer "the price". So it is sadly ironic that, when it comes to the office environment, probably nothing has been more limiting to the PCW than its cheapness (Sorry, Mr Sugar. Inexpensiveness).

This is because it appears that the average British business executive considers the personal computer more in terms of an ornament than a working tool. Admittedly most managing directors have only the vaguest idea what a personal computer can do. They know they have to have one (or at least their secretary has to have one).

But beyond knowing that it can knock out a letter or two, surprisingly few top businessmen have taken the trouble to find out what it can do for them – or their business. To them it is a glorified typewriter. And that is why, of course, personal computers sit on the secretary's desk and not on the managing director's.

If they can't justify the cost of a personal computer in terms of its use to the business, they might as well justify it to themselves in terms of aesthetics. It becomes a status symbol.

Skin deep

A computer has to look sleek, powerful and expensive to be acceptable. How else can you explain the fact that a supposedly sensible businessman will insist on spending £2000 on an IBM compatible computer to knock out a few letters, when he could have a room full of PCW's (with printers, of course) for the same money.

It's not that the PCW can't do the job. For word processing, it's excellent. For spreadsheets, it's more than adequate.

Okay. When it comes to handling large databases, it has its limitations. But databases are strange creatures. When you don't have a computer at your disposal, they seem to be precisely the kind of software you can't manage without. When you are faced with keying in the thousands of entries needed to make an effective data bank, it suddenly doesn't seem half so important. In any case, big databases tend not to be used on the secretary's computer. They are usually hidden away somewhere in a back room.

The same goes for desktop publishing or graphics packages. If they are used at all in a business setting, it's usually to create a notice saying "Happy 40th Birthday, Fred!" with a vaguely recognisable representation of three candles (they always get fed up after three and they never seem to grasp the notion of the **Copy** function). A PCW could do that and, when the output is printed on a laser jet, you couldn't really tell the difference.

The problem is, of course, that the old 8000 series PCW does have a homely look about it. There are none of the rakish lines, the go-faster stripes and the spoilers of, say, the Amstrad PC 2000 series.

Alec Rae observes the eccentricity of the spendthrift company director. "The average business executive considers the computer in terms of an ornament"

And worst of all – it only has a feeble green and black screen. Everyone knows the way a full colour screen will greatly enhance the production of internal memos.

The 9512 tried to look a bit more up-market, with its neatly tailored casing and regulation black and white screen. But by that time it was too late. Everyone knew PCWs for what they were. £400 computers. And who are you going to impress with a £400 computer?

Speed is of the essence

If asked why they persist in this illogical, spendthrift behaviour, businessmen usually churn out a well-worn response. The speed. The PCW just doesn't have the necessary speed. Now, I can type quite fast and yet I have never been able to type at faster rate than a PCW can cope with. Faster than my brain can cope with, perhaps. But I've never beaten the PCW.

In fact I've never heard of anyone getting a 'Typing too fast, slow down please' error message on the screen in front of them, coupled with a trail of smoke coming from the keyboard.

Admittedly it may take four seconds longer to save a file on a PCW. So if a typist produces, say, 60 letters in a day, she has saved anything up to a whole four minutes by five o' clock. Virtually every program on the PCW takes perhaps a few seconds longer than a similar piece of software on a PC. But how many people are really so busy that these seconds make the slightest bit of difference? Presumably the people who have no difficulty in justifying the purchase of an electric letter opener.

The other argument is that 'the PCW is not IBM compatible'. This is from people who think that DOS is what you do if you have nowhere to sleep and that CP/M is a brain disease cows get.

As someone who has to use both systems, I am more often disappointed in what the PC can't do than thrilled by its immense power. And as these business types do nothing but run software, how can they tell the difference?

Virtually all the standard business software available for the PC is also available for the PCW – usually at a fraction of the price.

It seems ironic that in a business based on logic, there are so many illogical decisions made. A PCW (or even a PC) would never make decisions that way.

We have the technology...

I was speaking recently to an editor of an in-house newspaper for a major industrial group. Hearing he was planning to introduce desktop publishing, I asked how it was getting along.

"Just signed the contract today," he said proudly. "£30,000. Mind you, I'm not convinced we will be able to use it to do the make-up on the paper. We're just going to sort out the word-processing side and then see about the desktop publishing later."

I had to admit to feeling a little surprised because first of all I couldn't imagine how he had managed to spend £30,000 and secondly, because I felt that spending £30,000 on a system that he didn't know would work seemed a little like taking £30,000 of the company's hard earned cash and putting it on a horse.

Of course he had no trouble explaining how he had managed to get rid of the cash. Three of the latest generation IBMs with 40 megabyte hard discs had been acquired. Plenty of room for a word processing program and quite a few issues of the newspaper, it would seem.

I wondered casually why he had chosen such powerful machines. "Multi-tasking" he replied.

"How does that work" I asked innocently.

"You can do two things at the same time," he explained patiently as if to a backward child.

"You've got two keyboards and two screens, so that two people can type at the same time?" I suggested gingerly.

"Well I don't know quite how it works but it is supposed to be first class," he decided.

He then went on to explain that they were to be networked. This is in an office where they have to stretch anything up to six inches to pass discs from one desk to another.

"What program are you using for the DTP?" I asked. "Aldus?"

"No," he replied firmly. "It's the very latest one on the market"

In retrospect, the most annoying thing is that I could have bought them three PCWs, a box of three inch discs and a laser jet printer, charged a £25,000 consultancy fee and still have saved the company money. There's always next time ●

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FOREWORD

THE WORD PRE-PROCESSOR

FOREWORD is the new program from Software Imperative, the people who brought you FLIPPER. It's a tool for writers: not just authors (though they'll certainly want a copy) but letter writers, report writers, sermon writers – in fact, anyone who works with words.

FOREWORD bridges the gap between ideas and finished pieces of text. It helps you put your thoughts into words, without worrying where those words will fit on the page or what typeface they'll be in.

"BUT I'VE ALREADY GOT A WORD PROCESSOR."

FOREWORD isn't a word processor, nor is it intended to replace one. Word processors are tools for presenting text on paper, and most of them do this very well. FOREWORD is designed for the stage before this, the creative stage of writing where your ideas are still too vague or unstructured for normal word processing. That's why we call it a "word pre-processor".

FOREWORD is specially designed to stop you getting bogged down in detail as your document grows. With a word processor, as soon as your text takes up more than a screenful you start losing that all-important "big picture" – the overview of your work that's the key to good writing. FOREWORD's powerful "Hide" and "Show" functions give you back that overview. Even when you've typed in thousands of words you can still get a clear picture of your piece at the press of a key, collapsing the on-screen document down to its bare bones.

FOREWORD also shuffles ideas around far better than a WP can. The "Move" function lets you pick up an idea and move it wherever you like within the document, regardless of how much text the idea comes with. There's no block-marking involved: whether it's one sentence or a hundred, you can pick an idea up or put it down again with a single keypress.

"SO WHAT HAPPENS WHEN I'VE CREATED MY TEXT?"

Because FOREWORD doesn't deal with typefaces or layouts, you'll need to get your finished text into a word processor or DTP package before you can present it attractively on paper. Normally, transferring data from one program to another is a fiddly, time-consuming business, but FOREWORD makes the task quick and easy.

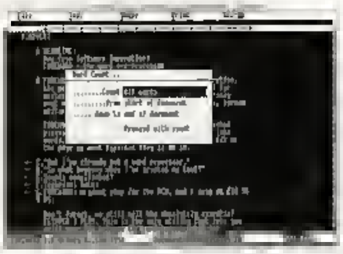
For one thing, there's no need to quit FOREWORD to use your word processor. FOREWORD is a pop-up program: it can share memory with Locoscript 2 or CP/M, hiding "in the background" until you summon it. Just hit SHIFT-ALT-EXTRA and in 1 second you'll be looking at the FOREWORD editing screen. Hit SHIFT-ALT-EXTRA again and 1 second later you'll be back in CP/M or Locoscript 2, exactly where you left off.

Also, you don't have to save ASCII files in FOREWORD and import them into your word processor. FOREWORD's "Transfer" function can force your text directly into a word processor document as if you were typing the words yourself. (Of course, if you find Transfer's 150-200 words per minute a little slow, FOREWORD is quite happy to save your text as ASCII: it supports two different kinds, plus a special format for WordStar and NewWord users.)

● A carefully designed menu system makes FOREWORD easy to learn and use.

SOUNDS COMPLICATED?

Don't worry: FOREWORD has a carefully designed menu system you'll be able to master in minutes. What's more, FOREWORD supports all those special-purpose keys you're used to, like UNIT/PARA, WORD/CHAR and LINE/EOL. CUT and COPY trigger lightning-fast block operations, EXCH/FIND gives you speedy search and replace functions, and PTR summons the Printer menu. (We couldn't find anything for the RELAY key to do: FOREWORD reformats its paragraphs automatically, as fast as you can alter them.)



● Writing for print? Then you'll appreciate FOREWORD'S fast, accurate word counter.

FOREWORD's even easy to install: it comes on a self-booting disk you can back-up and use immediately. No need to copy files or fiddle with PROFILE.SUBs – just switch the machine on, pop FOREWORD in the drive and it'll load automatically.

VITAL STATISTICS:

FOREWORD has a fast, accurate word-counter, can edit up to eight documents at once, and has no maximum file size. It takes a minimum of 112K of RAM, and a maximum of 2 Mbytes – the most a PCW can be fitted with.

FOREWORD is fully compatible with Locoscript v2.16 onwards (including LocoSpell, LocoFile etc), and with all legal CP/M programs. To run FOREWORD you'll need a PCW with at least 512K of memory. FOREWORD supports all SCA and Isenstein memory add-ons. For use with FLIPPER 2 PLUS, and with non-legal CP/M programs like Mini Office and Microdesign II, extra memory is essential. (FOREWORD won't work with earlier versions of FLIPPER, but you can upgrade these for free if you order FOREWORD at the same time.)

FOREWORD DOES NOT SUPPORT:

- File passwords and file time/date stamping;
- Foreign-language keyboards;
- Hard drives;
- Printers on external serial/parallel interfaces (though the 9512's built-in parallel port is fine);
- Single-density or single-sided B: drives (though 720K $5^1/_4$" or $3^1/_2$" drives are okay).

DON'T FORGET:

We still sell the absolutely essential FLIPPER 2 PLUS. This is the only utility that lets you split your PCW between CP/M and Locoscript 2 (or between two lots of CP/M – or even between two lots of Locoscript 2, if you've got the memory).

In as little as two seconds FLIPPER 2 PLUS can whisk you from one side to the other, without losing your place. Why reboot every time you need to get between CP/M and Locoscript 2? FLIPPER 2 PLUS can do the job quicker and better. (FLIPPER 2 PLUS requires at least 512K of RAM, and is fully compatible with SCA and Isenstein memory add-ons.)

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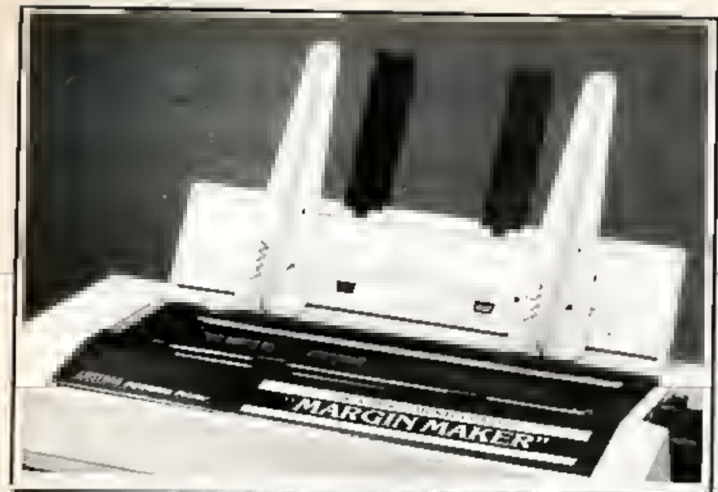

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The Missing Link

Can the PCW and the PC speak the same language? Karen Donaghay shows you how you can use LocoLink to get them talking

You may be happy with your PCW, but there are many other machines around. The time could come when you are confronted with an unfamiliar model and the chances are that the machine in question will be a PC. It is precisely this thought which prompted the arrival of LocoScript PC, which allows you to use a different machine with the comfort of the familiar PCW LocoScript environment.

As soon as you set up LocoScript PC you are in recognisable territory. Those easy-to-use menus are preserved in all their glory.

However, for the long term PCW user, this familiarity does not completely allay the sense of loss. Still missing is that large collection of documents written on your PCW.

There are several important reasons why you can't use PCW files on the PC. Not only does the PC use different sized discs (either 3.5 or 5.5 inch discs) but the format of your PCW LocoScript documents is not the same as the format required by a PC LocoScript file.

Clearly, this is not ideal for the installation of LocoScript files created on the PCW - or at least it wasn't, until LocoLink arrived.

Bridging the gap

LocoLink can help to cross the divide between the two versions of LocoScript. It allows you to transfer files from the PCW to the PC, where they can be used without further conversion. Not surprisingly, this can avoid a great deal of re-typing.

The LocoLink package comes complete with all you need to make the transfer. There is a cable, with suitable attachments at either end, designed to run between the PCW interface card and the PC's parallel port. This takes care of the physical link between the two machines. The next step is to run the software.

Two programs are needed before the transfer can take place – one to send the files from the PCW and one to receive them on the PC. The PCW side is provided with the LocoLink package. The PC version is found on the first LocoScript PC master disc.

To start the transfer, the relevant program discs are put into the drives of each machine. To set the wheels in motion at the PCW end, the instruction **LLPCW** is typed in, followed by a description of the files you wish to transfer.

This can be a complete disc, an individual LocoScript file or even a particular group. You can also specify types of files; for example, **S*.*** will tell the program to limit the transfer to those files which begin with the letter S.

Code of practice

At the PC end the instruction **LLPC** is typed in, followed by a description of where you want the files to be saved. This can include both the disc you would like the files saved on to and also the destination directory. Directories are similar to the user groups of the PCW. The difference is that directories can have sub-directories, which in their turn can also have sub-directories and so on. This allows the creation of a highly structured filing system, known as a tree structure.

Transfer your LocoScript files on to the PC with the help of these two discs. The LocoLink pack even includes the cable

It may sound confusing but it doesn't have to be. Each user group on the original PCW disc will become a separate directory on the PC version, and they can be treated in much the same way. Imagine, for example, that you wished to transfer a whole LocoScript disc over to the PC. The disc you wish to transfer from is an A drive disc, and the destination is the B drive of the PC. At the PCW end you would type in **LLPCW a:[RETURN]**, and at the PC end you would simply type in **LLPC b:\ [ENTER]**. The files would end up at the top of the PC file structure, with each group becoming a new directory.

Before the transfer actually takes place you are prompted to put the correct discs into the drives. You then press the [RETURN] button on the PCW, and the [ENTER] key on the PC. You don't have to sit there desperately trying to hit the two buttons at exactly the same time – a pause of a few seconds won't do any harm at all. The transfer can be abandoned by typing in **[CTRL]** C at either end. LocoLink can avert any potential disasters by checking that you are not trying to overwrite any files already on the PC disc.

Lost in limbo

When an entire LocoScript disc is copied, the limbo files are ignored, so that only user groups 0 to 7 are copied over. In the process of transferring a LocoScript file the format is changed so that it can be used by LocoScript PC.

The only thing this conversion process doesn't undertake to do is to fill in the printer details for each file – quite simply because the PC can be used with many types of printers, so it is usually more convenient to fill in these details when you first edit the document.

Another way in which LocoLink can be put to good use is for the transfer of CP/M files. This is achieved by typing /C when the instruction **LLPCW** is first entered. In this case, all of the user groups (0 to 15) are transferred. This is only a useful exercise if the CP/M files in question are compatible with the software you are running on the PC.

The safest option, of course, is to use a database such as LocoFile. Since LocoFile is also produced by Locomotive Software, there is a special command incorporated into the program for the transfer of datafiles from the PCW to the PC. The file is transferred as usual using LocoLink. It is then converted by an option available in LocoScript PC called, believe it or not, 'Squash datafile'.

Likewise, all other LocoScript add-ons, such as LocoMail documents and LocoSpell user dictionaries, can be made to fit the PC mould.

Moving from one computer to another is a little like moving house – but with the use of LocoLink at least some of the furniture can go with you.

One way ticket

For the time being at least, LocoLink can only transfer in one direction. Any LocoScript files sent the other way will be completely unintelligible to LocoScript on the PCW.

Fares, please!

The cost of sending your PCW files on their journey to the unknown is £34.44 (the price includes VAT). This includes the cable and disc. LocoLink is available from Locomotive Software on 0306 740606

Pictures into Print

David Askham proves that to a busy editor a picture can be worth a thousand words.

Above: **London at night. A good generic picture with plenty of space around Big Ben to permit its use as a front cover, where over-printing is also required.**

Imagine you have just received the latest issue of 8000 Plus and find that all the editorial features are made up entirely of words, with not a picture in sight. The magazine would immediately lose its appeal. Good pictures complement the text and help a reader to understand what an author is trying to say.

Freelance contributors are particularly well-placed to provide illustrations to accompany their work. However, many fail to provide editors with a selection of relevant pictures.

Screen shots

Providing pictures of VDU screens can pose problems. The camera must be able to focus close enough to the screen to fill the camera frame and the axis through the lens should be as near as possible at 90 degrees to the centre of the screen to avoid distortion. This is much easier with a SLR camera. Room lighting should be switched off to prevent reflections and you should never use flash illumination for this kind of shot.

What, a picture?

The first step when considering your choice of photographic material is to assess the needs of both the editor and the publication.

Life is made much easier for the editor if contributors supply pictures as well as words, with both neatly dovetailing and complementing each other.

Photographs may be submitted either as colour transparencies or black and white prints. Although colour prints can be used, colour transparencies are much preferred because printers are equipped to get the very best results from colour reversal material.

Ideally photographs should be sharp, correctly exposed with well-saturated colours and a good range of tones (if in monochrome), well composed and above all, relevant to the copy. They also score bonus marks if they have impact. Some editors select a picture for the front cover from those illustrations provided for an inside feature.

Decent exposure

So, how do you go about capturing a sharp image? The process is influenced by two factors: the first is a good quality lens, and the second, a steady hand when shooting pictures. Most modern cameras have extremely good lenses, the result of computer-aided design and careful manufacture. Any lack of clarity can be attributed to focusing error or camera shake – the most likely cause of disappointing results.

Camera-shake accounts for most unsharp photography, so it is worthwhile practising holding your camera steadily when taking shots. Even better is to use a tripod whenever possible. The best way to polish and perfect technique is simply to practice, and become at ease taking photographs.

Correct exposure is essentially the consequence of effective automation in the camera but, in some situations, adjustments can be made by the operator to improve results, especially where lighting is tricky or directed towards the camera. Manual override of automated exposure settings calls for some skill and experience. Fortunately most modern cameras give you good results in most situations.

If in doubt, it is a good idea to bracket exposures by taking extra shots giving plus and minus a half or one whole stop ('f-number' or exposure value). Thus you will have several versions of the important picture, each with a slightly different exposure. Then, you simply have to pick the best one. In difficult lighting this method is used by most professional photographers and is far cheaper then having to rephotograph the subject.

Good composition, or how the elements of a picture are best arranged, is a skill which has to be learned by the photographer. Cameras cannot automatically select the best composition. A good rule is to simplify the components of every picture you take and avoid placing important features near the edges of the frame. Aim for unity of interest and watch backgrounds.

As far as the relevance of the picture to the subject of the article is concerned, this is less of a photographic skill and more one of judgment. At some point in the initial drafting of an article, potential images will often suggest themselves to you.

Sunflowers. A wide-angle lens permits a telling close-up while preserving the mass of flowers in the field

If profiling a person, then a good portrait of the subject is certainly needed. This could be a simple 'head and shoulders' shot, or one showing the person in the appropriate environment, possibly engaged in relevant activity.

Hold the front page!

Pictures used on the magazine's front cover must satisfy additional criteria. Sometimes pictures occupy the entire front cover and are over-printed with the magazine title and contents headlines. The visual effect can become extremely confusing unless the background picture has suitable blank areas to receive the title and other lettering. Of course life is much easier if a front cover picture is used, either in full or in part, without over-printing. Study your target publication to discover the editor's or designer's preferences.

With the magazine's designers in mind, photographs should also permit some flexibility for page layout. They should be capable of being trimmed, at least to a small degree, without losing their effect. You cannot assume that the designer will share your perception of how a picture is composed when the magazine page is laid out; by presenting a 'flexible' shot, you are enabling the designer to then tailor your works to his or her needs.

Another sure way of achieving flexibility is to give editors a choice. Send more pictures than are strictly needed or are likely to be used. Offering a variety of portrait and landscape picture shapes can make your contributions so much more welcome.

Another requirement which occasionally arises is the need for a 'model release' (written permission, signed by the subject, for the pictures to be published in specified ways) when pictures of people are used in certain applications. This seldom applies in the circumstances we are discussing, but could apply if the photographs went on to be used out of context, such as in advertising or promotional features.

Camera consideration

Choice of the 'hardware' to employ in producing your own photographic illustrations is an important consideration.

Photographic magazines specialise in technical reviews of cameras and lenses, and are a good source of advice if a round-up of the products on the market is what you require.

Almost any camera can produce pictures suitable for publication. However some are definitely more flexible than others.

The chief considerations when choosing a camera are as follows; reliability, lens quality, the need for a parallax-free viewfinder (so that your pictures include all of the subject you studied through your viewfinder), and the ability to focus the lens at short ranges. This can be critical when photographing a computer screen or small, detailed objects. Given a free choice, pride of place will probably be given to the modern 35mm single-lens reflex – or SLR – camera. It is very versatile, able to tackle most types of photography, and its ability to use zoom or interchangeable lenses makes it very flexible.

A popular alternative is the modern 35mm compact camera. There are many on the market ranging from simple fixed-focus models, to fully automated ones with built-in zoom or twin lenses. Avoid the simplest and cheapest models; if funds permit, choose a model with at least automatic focus and exposure control. A built-in flash can be convenient, but a separate flash unit which can be operated away from the axis of the camera lens is more useful.

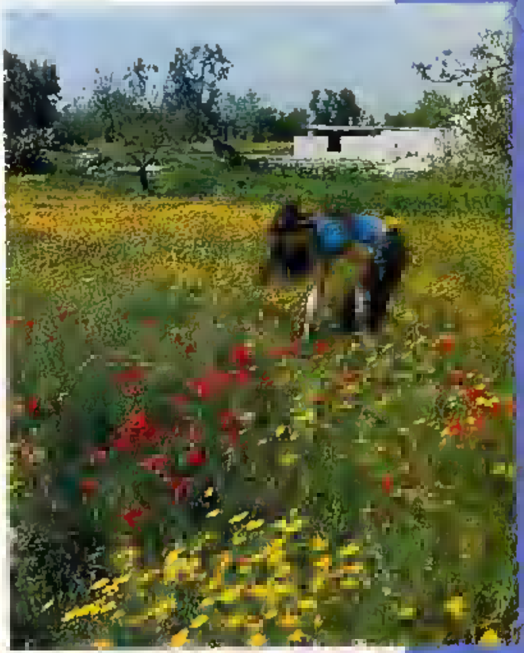
Finally, a word on the choice of film. The first decision is whether to shoot colour transparency or monochrome. Both have their place in a publication but be guided by your editor. Ideally, shoot both colour and monochrome, although if you only supply colour slides the editor can convert transparencies into monochrome .

Films are made with different 'speeds', known as ASA or ISO ratings. You specify the speed you want when you buy your films. For the best results, judged by sharpness and lack of grain (visible as small dots when an emulsion is magnified), choose a slow or medium-speed film. A good all-round choice is ASA 100, particularly with 35mm cameras. Slower films such as Fuji Velvia and Kodak Kodachrome are even better, giving optimum results provided that lighting and subject movement permit.

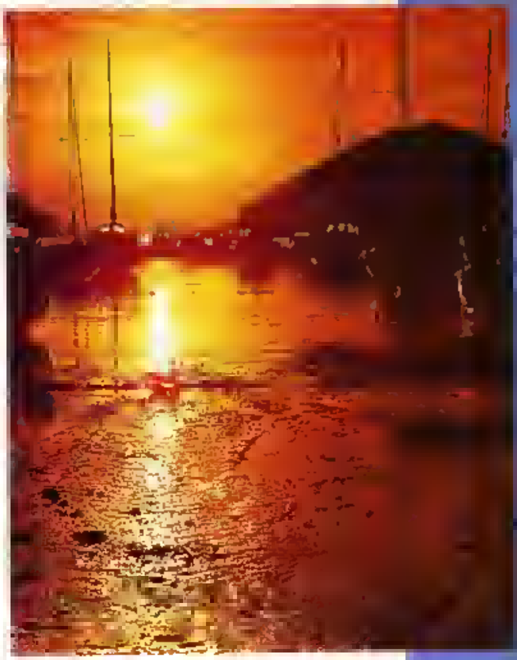
Quality processing is essential for best results. With black and white you may have to search around to find a good processor, unless you are able to do it yourself.

Colour processing is widely available, but some laboratories are better than others. For consistently good results seek out a reliable, professional laboratory.

Above: Stained glass Viking. Transmitted lighting is vital when trying to show off the beauty of coloured glass to its best advantage.



Top right: Spring in Apulia. This scenic shot lends itself to many applications and gives a designer scope to trim the picture for differing effects. The use of a figure in what is basically a landscape shot, also adds life to most photographs.



Right: A good sunset (Watermouth, Devon) touches the emotions and has good impact if done well. Ideal for mood or ending a sequence. Again the picture can be cropped to either landscape or portrait format.

So what is left to be done when you have your pictures? First, carefully select the set of photographs you will send to the editors. You should have found out how many are needed. Each picture should be accurately captioned and listed in your manuscript.

Remember to include your name and address on each photograph.

Do not send colour transparences mounted in glass. Accidents can easily happen, fingers cut and priceless images can be damaged.

Finally, aim to leave the editor wanting more of your work. It makes life easier when the editor can call on competent and reliable contributors. ●

Good Company

Alec Rae and Micro Design walk you through those all-important first paces in putting together a corporate identity. This month he looks at logos ...

All the big companies have a corporate image, so why shouldn't you? Well, probably because if you do it the proper way (agencies, top graphic designers, colour consultants, name finders and so on) it will cost you something in the region of £!!!! million.

Unless, of course, you have a PCW and Micro Design. In which case you can have a corporate image that will cost you a bit of imagination and a few hours work.

And you don't need to be in business to want to create an image. It is amazing how all kinds of clubs and societies benefit from a professional attitude towards presentation. Everything from agendas to raffle tickets could be brightened up and made instantly recognisable by a simple logo.

Or you might even want to create your own style for your personal correspondence. Again a simple logo at the top of your headed paper can say a lot.

If you are not over-talented when it comes to graphic design, you may find it worth while to chat to a freelance designer to give you a start with some ideas. Then you can use your PCW to save you money by putting these ideas on to disc. By using a good logo and by sticking to a design plan you can certainly create the impression of being both artistic and professional.

All or something?

The first thing you have to decide is how ambitious you are going to be. Are you going to completely revamp your image or start in a small way and build things up gradually?

You can start with simple decisions. Pick a colour or colours that you think would suit your company. This could simply be the ink that you use for the text and logo in your pre-printed literature. Or you may want to pick a colour scheme for every aspect of your business, right down to the paint on the company van.

Using coloured paper for a letter immediately gives an impression that it might take a long time to achieve in other ways. Certainly the coloured ribbons that have become popular for the PCW usually look better printed on to a coloured page.

Having said that, colour, like many design elements, must depend largely on the type of business you are running. Pink paper could well be suitable for a florist but might cause an unexpected reaction in a ready-mix concrete company, for instance.

White paper is usually a safe bet for most businesses, but may be thought unimaginative for, say a craft shop or a design consultant. Blues, greys, browns and ochres will give a business-like feel to your designs.

It is most cost effective to pick one of the standard ink colours. Ask to look at the standard Pantone colours first (see margin note). These include yellow, warm red, rubine red, rhodamine red, purple, violet, reflex blue, process blue and green. These are the colours that all the other shades are made up from. So by choosing one of these you should save yourself the cost of having a colour specially mixed. They should be the same whatever printer you go to. You could also pick one of the process colours – the ones that make up full colour printing – again avoiding mixing costs. These are cyan, yellow and magenta.

Of course if money is not the main consideration, it may be worthwhile picking a distinctive mixed Pantone colour, which could give your literature a more distinctive feel.

Pick a typeface

Another easy way to create an immediate visual impression is to pick a typeface. There are also great dangers in this. There are literally hundreds of different faces to choose from. Micro Design alone can offer 20 faces (some are the same font at different sizes), from the standard Times Roman and Helvetica to the more exotic Broadway and Old English.

These can be further adapted by using bold, italic, double strike, outline and reversed. If you are really keen, there is the opportunity to be even more original by adapting the fonts.

If you're still not happy, there are a couple of extra discs, with enticingly named fonts such as Scribble, Outrigger, Calligraphica and Baghdad (strangely enough that one doesn't have the letters K, U, W, A, I or T). The main thing to remember when choosing a type face is that they do different jobs. A seraphed font like Times Roman (one with little blobs to mark the end of a letter) is the more readable while a 'sans' face like Helvetica (one without a seraph) is more modern and business like. Baghdad and Scribble may look impressive but they can be difficult to read if there is a lot of text. On the other hand they can be ideal for logos and letter heads. This is the first of a series of tutorials that will hopefully give you some ideas on how to brighten up your company literature, your club agenda or even your personal headed paper. The idea is to help you build up a design plan that you can apply to any piece of literature you want to produce. Making design decisions at the beginning gives a consistency to all your material and take much of the uncertainty out of print buying.

Drawing conclusions

Micro Design II is the ultimate DTP program for the PCW as far as printout quality is concerned. It costs £59.95 and is available from Creative Technology. For further information, call them on 0889 567160.

What is a corporate image anyway?

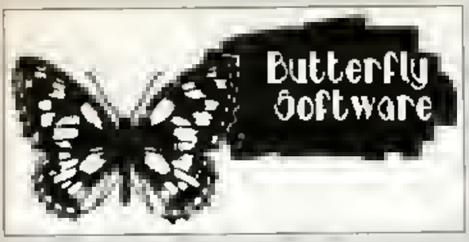
Corporate image is an expensive way of saying "instant recognition". It's the BP shell or the Esso tiger. Even the Levi red tag. It's a way of making anything that comes from your company instantly tied, in the customer's mind, with you and your products.

Of course, it is much more than just a logo. It's a colour, a type style, a consistency of design – in fact a complete package, taking in everything you produce, from the product label to the final demand, from the glossy brochure to the envelope label.

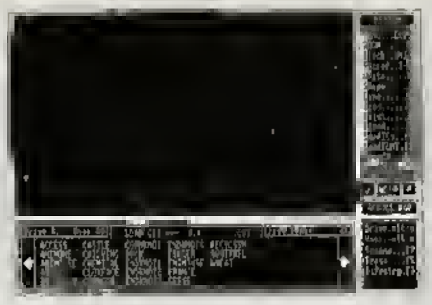
The advantages are obvious. If your customer immediately recognises sales literature from your company, you have an immediate advantage.

But the costs are also just as obvious. If you go to an advertising agency they will convince you that you need to have everything redesigned. Throw away all your letter heads and sales literature and start again.

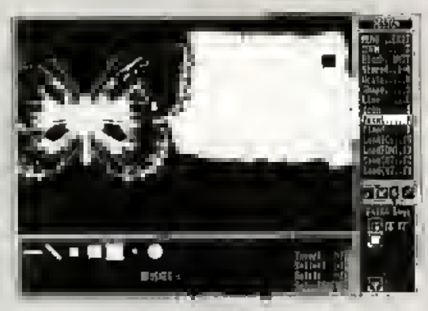
As this could represent two or three months turnover to many small businesses (not counting the agency fee, which could cost 10 years turnover for many people) it is perhaps more sensible to look for a compromise.



1 Finished print out of butterfly logo



2 Clip art loading



3 Producing the black box

1 The most obvious starting point is to design a new logo. If you are lucky you may already have an image to use. There are many examples of clip art that specifically tie in with a trade or a club activity. For instance, a dog grooming parlour will have no problem finding and modifying a clip art image of a dog to suit.

Micro Design 2 takes clip art from many different sources. Look through the ads to see if there is anything suiting your activity but try to see an example of the picture first.

Perhaps the name of your company might be the key. Butterfly Software Ltd, for example, need look no further than the Micro Design 2 Cuts disc where they find BUTTRFLY.CUT. Some people have been known to call a new company by a certain name just because they had suitable clip art.

Although it is not strictly neccessary, it is quite sensible to include your company or club name in the logo. Check out the available fonts to find the most suitable style for your particular business.

2 To load the clip art, you need to be in design mode. Press [EXIT] to reach the menu and choose [D] for Design. Click on the downward pointing arrow, below the main control box on the right hand side of the screen. This will reveal the cursor arrows and your position on the page. Move the screen to the top left hand corner, as it is easier to find it there if you get lost.

To load the image, press [f1] for loadCUT. If your clip art disc is in drive A, you may have to change the drive. Press [ALT] and [V] until you get A:*.CUT above the box at the bottom of the screen. Click on BUTTRFLY.CUT and then either click on the tick or press [RETURN]. An empty box will appear on the screen.

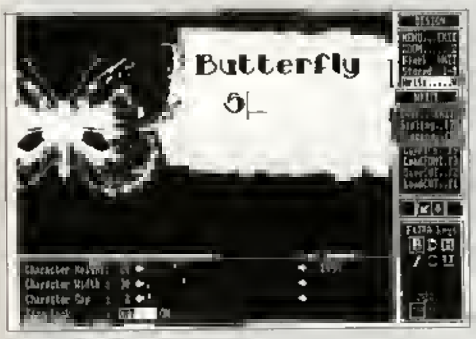
This helps you place the image on the screen. Use the mouse, clicking the left hand button, to move the box to the left hand side of the screen and click on the tick box.

A butterfly will be loaded from the clip art file and appear in the box, as if by magic, ready to be used in your logo.

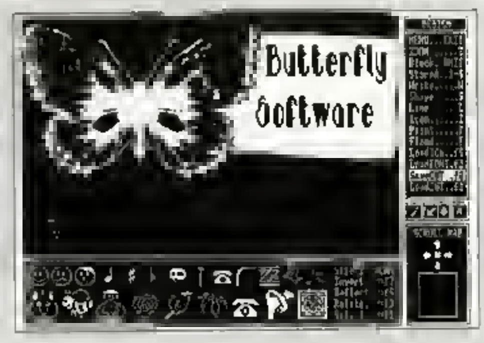
3 Now mark out the area where your text will go. Choose P for Paint and click on to the little brush icon to choose your brush size. Pick a small brush (the little circle is quite a good one for detailed work) and the cursor will change shape to suit.

At the bottom right section of the screen, there are three boxes, black, white and patterned. You can, of course, write on a black part of the screen with, in affect, white ink – 'reversed out' text so beloved of newspapers. Click on the black square and you will see a little box appear round it to show that it is the selected option.

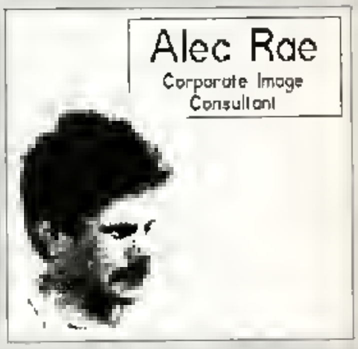
With the cursor, carefully fill in a black square by the butterfly's wings, trying to leave a small area of white to delineate the shape. Build up a rough square large enough to take your company name, with space to spare. Don't attempt to get the sides straight, or to make it look tidy – this is artistic. Once you have finished the detailed work choose a bigger brush for more dramatic brush strokes.



4 Loading in text



5 Saving as a Cut



6 Finished version of face logo

4 For an 'arty' style logo like this, you would be forgiven for choosing an 'arty' font. As there are only a couple of words, readability is not a problem. Press [f3] to load a font. Put the Micro Design 2 font disc in the correct drive and press [RETURN]. Click on BRDWAY16.MDF and [RETURN]. You now can use the Broadway font, much beloved of wine bar sign-writers the world over. Pressing [W] for Write takes you into text mode. You can always erase text with the delete key. To start a new line, do not press [RETURN] (that takes you to the left hand margin). Move the cursor to where you want to go and click. Pick the face size by clicking on the arrows at either end of the Height bar, increasing or decreasing as necessary. Now type in your company name. Choosing B for Bold in the Extra keys is a good idea when working with white on black.

5 Save this with the SaveCut option [f2]. When this option is chosen, a box appears on the screen. Move the cursor to the centre of the logo and press the left hand button of your mouse. This sets the centre of the box. You will see a small cross (or handle, as it is called in the trade) marking the spot.

By clicking on the right hand button, you can move the handle to the top right and bottom left corners of the box in turn. While the cursor is pointing at the corner you can 'drag' it to any point on the screen, by placing the cursor on the handle, holding down the left hand button and pulling the corner out or in as required.

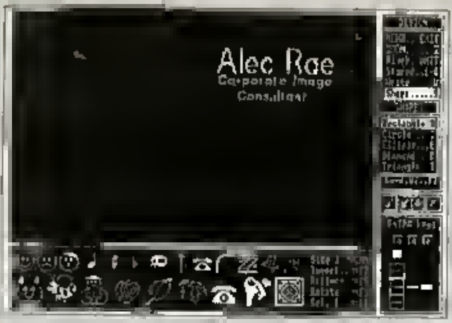
Drag each corner in turn to create a box that neatly contains your logo. You can now save the area within the box. Click on the tick and choose a name for the file – LOGO.CUT would seem quite apt.

6 If you don't have or can't find any clip art to suit, you might try to get access to a scanner or digitiser.

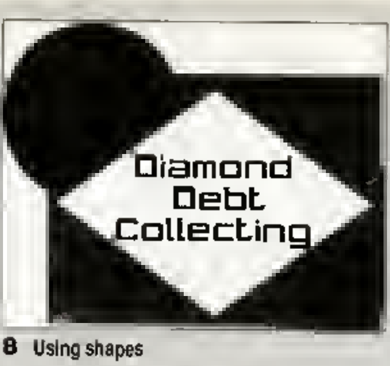
If your product or premises are instantly recognisable you could use produce picture files to suit. Or, if you are in a business where you are selling your own services (such as a highly paid corporate image consultant) why not use a scanned image of your own face.

Scanned or digitised files have to be loaded with the LoadAREA command in the Layout screen ([EXIT] and [L]). Load this up and switch back to Design mode to choose the part you want. Save it as a .CUT file, as this is much easier to handle.

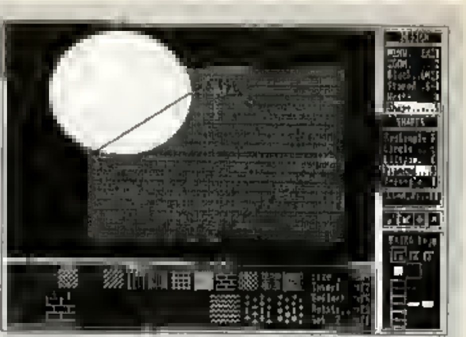
Try to pick an image without too much detail. You will probably want to use your logo at varying sizes. Highly detailed scans can end up as black blobs when reduced.



7 Box with text



8 Using shapes



9 Square and circle

7 This time we start with a box – [S] for shapes and [R] for rectangle. Make sure the white box is chosen (bottom right) to produce an empty box.

Again, a box appears on the screen. The size can be adjusted in the same way as in SaveCUT mode – 'dragging' the corners to give you the right size for the text.

As we are aiming, this time, for a more 'business-like' effect, we chose the Helvetica type face. Helvetica is one of the 'sans serif' faces (there are no lines at the top or bottom of letters) and is popular when you want to give a modern, business-like impression.

There are various sizes of Helvetica and we chose **HELVET15.MDF** from the Micro Design 2 fonts disc. Type in the text, as with the previous example. The text comes out as black on white. You can add your scanned or digitised .CUT file in the same way as clip art.

8 Some businesses just don't suit graphic representation. Dentists and debt collectors immediately spring to mind. However, you may still want to try to create a simple design using abstract shapes.

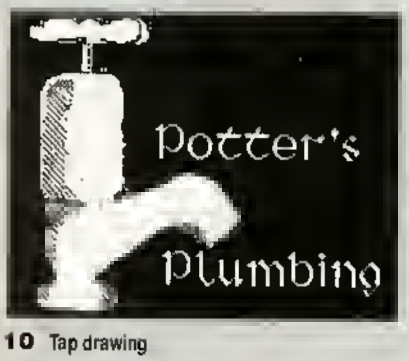
This has the advantage of producing a distinctive logo with the minimum of artistic skills. The essence of good design is shape, line and texture. So here is an excellent opportunity to make use of some of the interesting patterns available. Obviously you can choose any of a number of patterns although it is worth while sticking to some of the more mundane ones or the whole thing becomes like a 60's fashion show.

A good one to use is the bottom left square in the patterns (click on the pattern icon beside the brush and then [EXTRA] and [f1], which changes the icons to patterns). You will see it says 'set 2' on screen. You can use this at half size to achieve an effective, regular pattern.

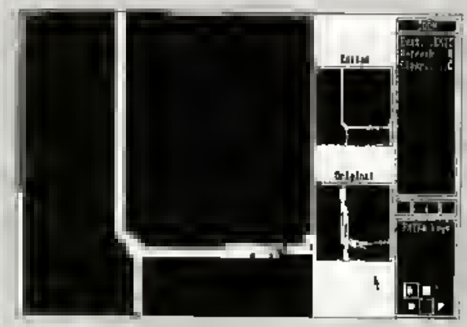
9 Start with a tilled box. This is the same routine as before – [S] for shapes and [R] for rectangle. This time, however, choose the box located in the bottom right corner with the pattern.

Then, when you have positioned and sized your box, click on the tick and the box fills with the chosen pattern. To add interest stick a circle in one corner – [S] for shapes and [C] for circle. Like the box, clicking on the left hand button centres it and clicking the right hand button moves the 'handle' to the circumference, where it can be dragged to any size. Choose the black box this time for a black filled circle.

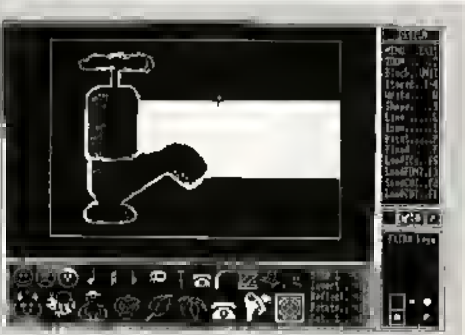
Just to be different, you then choose [D] for Diamond in the shapes menu and pick the white box for a white diamond. This can be placed in the middle of the rectangle and adjusted in the same way as the other shapes. This leaves an inviting white space to enter in your text.



10 Tap drawing



11 Free hand drawing



12 Adding the box

10 If you are still not satisfied, even the most unartistic user can 'go over the top' and try some free-hand drawing.

Always remember that the big advantage that a computer screen has over paper is that you can make a mistake, rub a bit out and have the picture as clean and fresh as new. That's not so easy when you are using a pencil and rubber.

Also, if you have a bit of time and patience you can use the Zoom facility to make minor changes to the tiniest detail of your drawing – an individual pixel.

If you are attempting free-hand drawing it is handy to have a picture of the object you are drawing in front of you. For our plumbing firm we chose a tap – an object everyone knows. But it is surprising how difficult it is to get the shape right, even with this straightfoward image, without the original picture to work from.

11 All you need to do to draw is hold down the left hand button. Using the mouse, get as near to the outline as you can. Don't worry if it's a mess. To rub out areas, use [P] for paint and click on the white box – in effect, this paints over with white paint.

Once you think you are reasonably close press [Z] for Zoom. A small square appears which you can place on the worst bit of your drawing and 'click the tick'.

Immediately the screen changes. The section you have chosen is blown up out of all proportion, so that you can work on individual pixels . A box shows the section as it was when you started and another shows it as you have changed it.

The white 'ink' box on the side can wipe out all the pixels you don't want by clicking on them. The black box can put them back again and the black/white switches a white pixel black and vice versa.

12 Once you have cleared out a decent outline, you might want to add a little shadow to make it stand out. You can then press [P] for paint and choose one of the available patterns.

Remember that if the object you are drawing is round, the shadow comes in a little from one side because of reflected light.

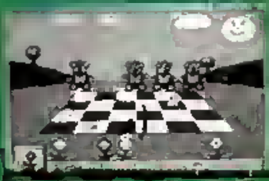
Then put it all in a white box ([R] for rectangle again]. Make sure that the outline of your shape is solid (no gaps in the line) and then chose [F] for Fill. Click on the black box and then click anywhere in the space between your shape and the outside of the box. The box then fills up with black ink, picking out your outline with impressive clarity.

Then it is a simple matter to add white text against the black background simply by choosing [W] for Write as before. What could possibly be easier than this?

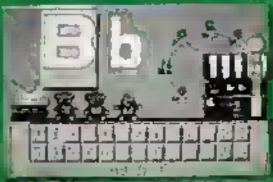
fun school 3

PCW Screen Shots

Under 5s

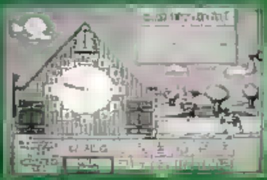


Count up to nine to help teddy get the honey

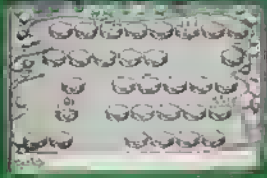


Pair the large letters at the alphabet fair

5 to 7s

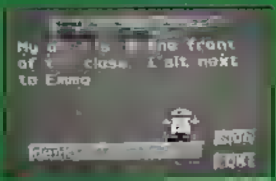


Tell the time and watch the clock come alive!

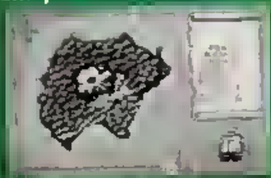


Guide the frog from log to log to solve the sums

Over 7s



Correct spelling, grammar and punctuation mistakes



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PC 3.5"		5894		5895		5896
Amstrad PCW		*5211*		*5212*		*5213*
Spectrum	9084	9085	9086	9087	9088	9089
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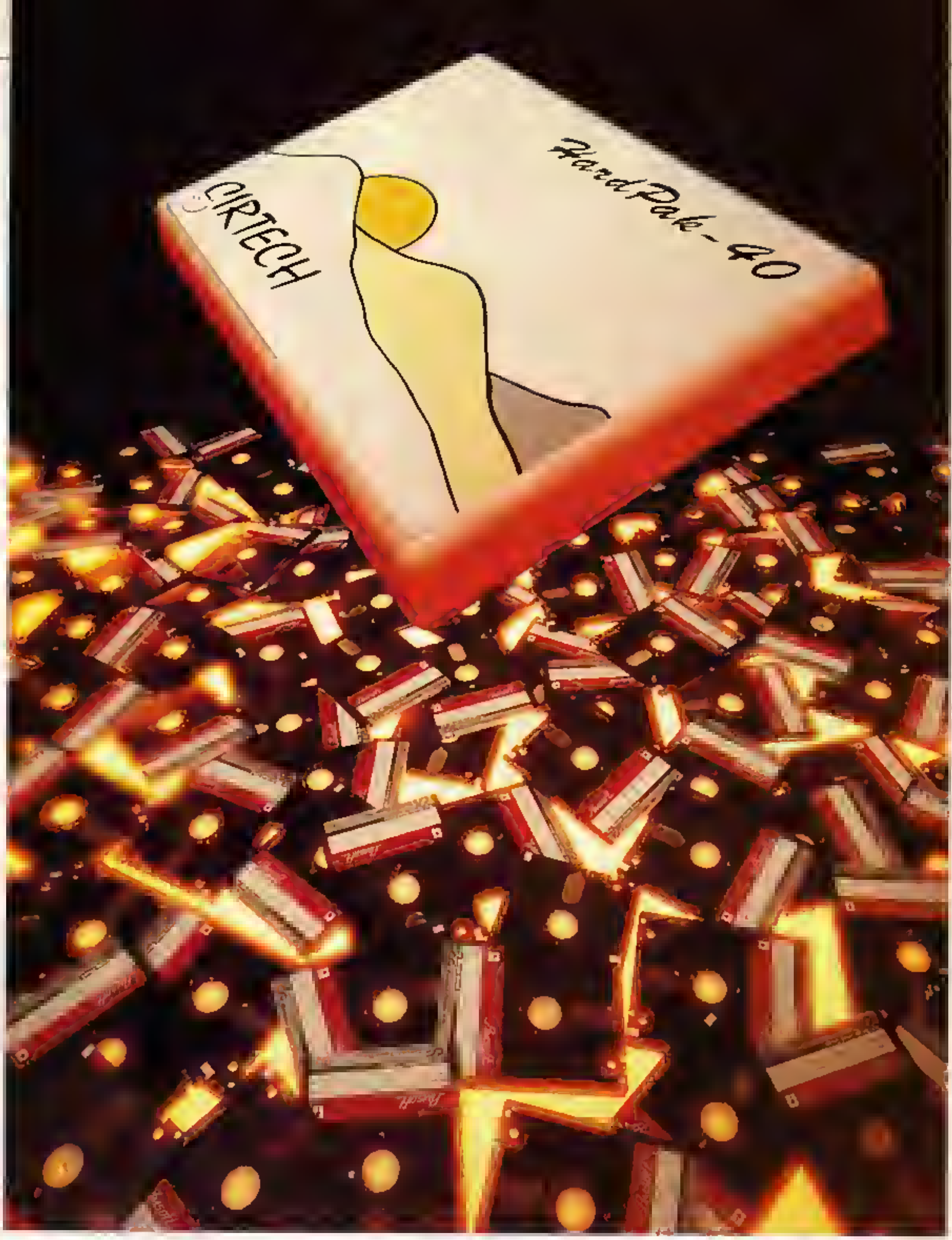


Hard at work

Alec Rae sizes up the potential of Cirtech's HardPak, the diminutive plug-on hard disc with outsized capabilities.

Will the ingenuity never end? It wasn't long ago that hard discs came in massive boxes considerably bigger than the PCW. Now a Galashiels based company, Cirtech (UK) Ltd, have come up with a hard disc hardly bigger than a box of chocolates – that can hold up to 40 megabytes of data.

That is the equivalent of nearly 60 of the 700k B drive or 9512 discs and around 230 8000 series A drive discs. In total it can handle up to 2000 files. But one feature should endear the HardPak to PCW users more than any others. It can run LocoScript 2 as easily as CP/M. You can choose whether CP/M or LocoScript is loaded by default. If you want the other option (For example LocoScript when you have opted for CP/M as default) you simply hold down the ALT key when you start up.

Perhaps the most accurate way to describe the new Cirtech HardPak is by saying it is hardly bigger than an RS232 interface – the little box that fits on to the back of your computer to allow you to link up to a modem, printer or another computer.

Like the RS232, the HardPak fits on to the expansion port (the slot on the back of your PCW), leaving you a totally uncluttered desk.

Hard cash

Hardpak comes in two handy sizes. The 40 megabyte version costs £599 and the 20 megabyte is £499. For more details phone Cirtech (UK) Ltd 0835 23898.

Important ?

How popular HardPak's ability to accommodate LocoScript will be is difficult to gauge. Most people who buy a hard disc are probably wanting to do more than just word processing which would suggest that virtually everyone will be using CP/M in one way or another.

While you can easily close down a CP/M program and load up a CP/M based word processor, loading LocoScript still involves completely re-booting the system – a minor inconvenience, but one that might make a difference to the serious user.

This could be the one of the few disadvantages of the HardPak. If you use an RS232 or a mouse regularly the HardPak does compete with them for the same slot. It has no facilities for 'piggy-backing' (the process of fitting one box on to another), so that you would have to choose an RS232 that allows this, putting the HardPak on the outside.

Using a mouse would be more problematic as most PCW mice would not allow for piggy-backing. It means that HardPak cannot really be used with graphics or desk top publishing packages – a real pity as it is when you start getting into that kind of program that the files start to get big enough to really require a hard disc. But ,sadly, you can't have everything.

Small is not surprising

It is not surprising that a hard disc could be made as small as this. Already there are a number of portable computers on the market with built-in hard discs smaller than the average brief-case which hold a lot more information.

In fact the two and a half inch disc used for the HardPak is based on the system used in the most recent Toshiba portable computers. Cirtech believe that they are the only company using this type of disc in the UK.

One major problem with the traditional hard disc was the damage that could occur if you moved it. There was a rather lengthy process involved in 'parking the disc head', an operation which had to be carried out before you dared move it an inch.

The disc head is the part of the computer that actually comes into contact with the disc as it revolves and reads the information. Any sudden movement when the head is in contact can cause serious damage to the hard disc. Parking the heads on these discs involves moving them to a part of the disc where they can't do any damage.

As portables need to be far more robust than an ordinary computer, the system is designed to automatically park the heads if the disc has not been accessed for about 20 seconds. Instead of moving the head on the surface of the disc the machine physically lifts the head off the surface until it needs to access the disc again.

The company also claim what the manual describes as a "whisper soft disc mechanism" for the HardPak. Certainly the hum of the machine is barely audible under normal circumstances.

If you listen carefully to the hum, however, you can sometimes hear a tiny clunking sound. This, the makers assure us, is the natural sound made by the heads engaging, although it can be quite worrying the first couple of times you hear it.

One other advantage to the automatic head parking (or the 'power down mode' as the manual quaintly chooses to call it) is that it actually saves power.

The power use of the hard disc will not be immense but this ability to literally switch itself off when not in use must save some electricity.

Taking things seriously

Perhaps the most pleasing aspect of this technology being applied for an add-on to the PCW, however, is that it is a pretty solid indication that manufacturers are still taking the machine seriously and consider that PCW users take their machines seriously enough to pay £499 for a 20 megabyte or £599 for a 40 megabyte disc.

Obviously at this price it is the sort of investment that would only be considered by the more serious user. It is a full £100 more expensive than a similar size of the traditional-style Diamond hard discs that Cirtech produce.

However when you consider that for most simple applications like word processing or spreadsheets, a PCW with a HardPak could handle all the work that a IBM compatible PC could handle, at similar speeds and at a fraction of the cost, it suddenly begins to make sense. A hard disc, like this, takes away yet another excuse for dismissing the PCW's potential as a serious business machine.

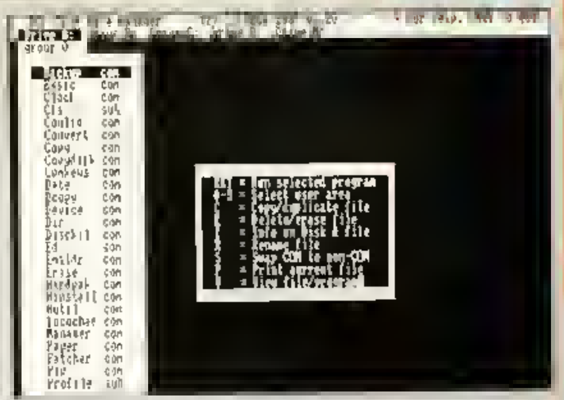
Where do I begin?

The HardPak comes already formatted – taking care of that rather tedious and time-consuming task undertaken by the owners of the old style hard discs.

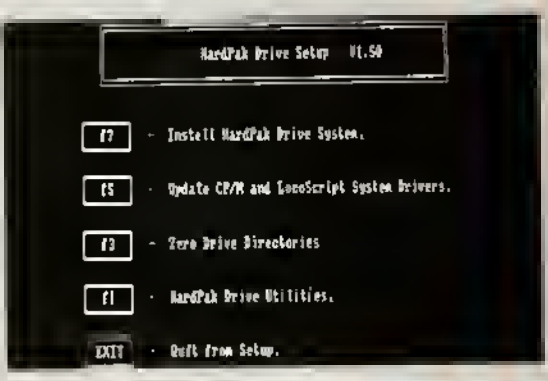
It also comes already divided into two equal sections. This does give less flexibility than most hard discs.

The most time consuming task is getting the machine set up to accept LocoScript 2. The problem is that the equipment can only handle the latest edition of LocoScript – version 2.28.

Through a deal with Locomotive, Cirtech have included software in the package able to update your version of the program to 2.28 if necessary. This involves you in loading in all your Start of Day discs and, importantly, the original LocoScript 2 master disk largely as an effective check against someone trying to install a pirated version of LocoScript 2.



Allhough perhaps not the best tile organiser the File Manager provided should help you tind your way round the Hardpak



HardPak Drive Setup V1.50

f7 - Install HardPak Drive System.

f5 - Update CP/M and LocoScript System Drivers.

f3 - Zero Drive Directories

f1 - HardPak Drive Utilities.

EXIT - Quit from Setup.

The Inslallation program also gives you access to other utilities

The HardPak Support Disc software (there are different versions for 8000 series and the 9512) copies your start of day discs complete on to the hard disc.

This could cause a little confusion. There is one copying utility available on disc which you are supposed to use the first time you set up the hard disc and another for adding programs ➤

Speed is of the essence

One major selling point of a hard disc is that programs run faster than if you are running them from floppy discs. The Hardpak does make a serious claim to being the fastest PCW storage device available – capable of storing 152,381 bytes per second (pity the poor devil that had to count them). This, the makers point out, is faster than the M drive.

Whether this is a consideration for you depends a great deal on what you use the PCW for. Saving or loading small files with a hard disc will obviously not make substantial time savings over a floppy disc.

For instance a 2k Protext text file is saved in under two seconds on Hardpak instead of seven seconds on floppy disc and it loads in two seconds instead of four.

Certainly it can make more of a difference with big files. Hardpak loads a 20k file in Protext in four seconds compared to 11 seconds on floppy disc. Saving a file shows even more of a difference with a 20k file being saved to hard disc in four seconds instead of a massive 23 seconds for the floppy.

Another one area where Hardpak can really help speed things up is in the handling of overlay files.

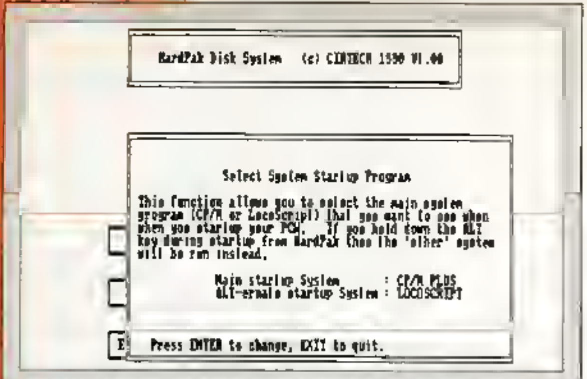
The PCW, like every other computer, has a limited amount of space (working memory) to hold the program files it is using at any moment.

If a program is bigger than can be run in working memory at one time, it uses a device called overlay files – a series of program sections that can be called up and run when required. As one part of the program is emptied out of working memory, another one is loaded in.

Often these are loaded in advance into M drive for easy access. Access from M: drive is considerably quicker than from a floppy disc.

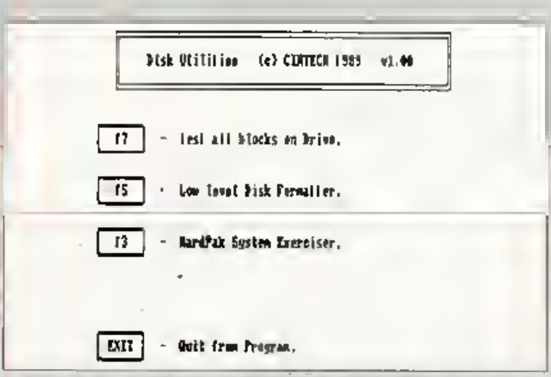
So consider the improvements in speed when using the Hardpak – quicker even than the speedy M drive. With no need to move the files over to M: drive when starting up and consistently faster times to access files, the running of large, complicated programs could be considerably improved.

But remember that the Hardpak does not increase the size of the working memory of your computer so it cannot actually speed the performance of any program. It can only speed the process of accessing files.



```
HardPak Disk System   (c) CIRTECH 1990 V1.00

Select System Startup Program

This function allows you to select the main system
program (CP/M or LocoScript) that you want to see when
when you startup your PCW.   If you hold down the ALT
key during startup from HardPak then the 'other' system
will be run instead.

Main startup System        : CP/M PLUS
Alternate startup System   : LOCOSCRIPT

Press ENTER to change, EXIT to quit.
```

It is easy to opt for CP/M or LocoScript 2 as the startup program



```
Disk Utilities   (c) CIRTECH 1989   v1.00

 f7   - Test all blocks on Drive.

 f5   - Low level Disk Formatter.

 f3   - HardPak System Exerciser.

 EXIT - Quit from Program.
```

There is no need to test for bad blocks unless things go wrong

later – an unnecessary complication. It might also have been more helpful if the program had led you through the process with a series of prompts rather than using the menu-driven software.

There is a surprising lack of information in the manual about this program and, while it contains many useful utilities, you can't help feeling you have missed out some vital element of the installation process. You flit nervously back and forward through the various options before you discover that most of the program is not really needed at that precise moment.

It is here that you find the program to test the blocks on the hard disk . You only need do this if things start to go wrong with the HardPak – thankfully, given the lengthy process which this entails. If you find any bad blocks you have to phone Cirtech for advice.

Heard it

Cirtech have included advice on how to organise your files. While useful there is nothing new in it.

It's the sort of thing that you can find in any back copy of 8000 Plus.

The HardPak Support Disc also includes utilities like the software to completely clear the hard disc. This is rather unhelpfully called 'zeroing the directory.' Obviously if the directories are zeroed the disc will be, to all intents and purposes, empty but it could have been explained more clearly.

As simple as ABC

One sign of the ingenuity of the manufacturers is the naming of the drives. Normally with a hard disc you will keep your floppy disc drives called A and B and call the various sections of your hard drive C, D and so on.

But to cater for programs built for the 8512, where sometimes programs are operated from both drives (often with the program disc in A and the data disc in B), the HardPak is divided into two equal sized drives called A and B.

So if a computer is set up to look for certain files in drive B, for instance, it will look for your hard disc and not for a floppy disc.

This is fine once you get used to it. But initially it can cause some problems, not least the worry that you might try to erase everything on one of your floppy discs with the old ERA a:*.*, when you really mean ERA c:*.*.

Another problem is that some programs carry out quite sophisticated operations to handle simple details like, for instance, seeing whether there really is a floppy disc in the disc drive before attempting to load a file or give a directory. This is so that the program can give its own error messages rather than the rather terse CP/M "Drive not ready – Retry, Ignore, Cancel?"

But how is the program to know that the floppy drive it is checking is now called drive C: instead of drive A:.

Protext, for instance, will not give you a directory of your hard drive until a disc is inserted in the relevant floppy disc drive. It doesn't matter which floppy is used – the machine will quite happily gives you the directory for the hard disc regardless. This is no more than a minor irritation once you know what is happening.

There might also be some confusion with some programs written specifically for the PCW when the software does not allow for the fact that there could possibly be 1000 files on drive A:. Cirtech are aware of the problems and reckon that there is nothing that cannot be easily overcome.

However a more serious confusion comes when you use LocoScript 2 when the two floppies are still named A and B and the two hard disc drives are called C and D.

Cirtech did try to make the drive naming consistent but found that this caused insurmountable problems with features like the LocoScript formatting or disc copying utilities. LocoScript just wouldn't accept that it could format a disc in drive C:, so Cirtech had to revert to the standard naming procedure.

File Manager and the lost file

With up to 2000 files on the one disc you naturally have to be more organised than when you were working with a 173k disc or you could waste all the time that you have saved loading programs and looking through disc boxes, searching vainly for the correct file on your hard disc.

HardPak comes complete with File Manager – a quite useful little program that helps you find your way more easily round the hidden depths of your 40 megabytes.

This is automatically loaded in M: drive and appears every time you leave a program, allowing you to find and run the next piece of software. It is like many other file organising programs. It allows you to look at directories of each of the drives, change user group, delete or rename files and even show the content of text files on screen.

There are one or two shortcomings in its design. For instance the directory for each drive is given in one long list that often runs to more than one screen.

It also is remarkably unhelpful when it comes to screen prompts. The keys used are pretty sensible (R for rename, E for erase), but the list of features available is only shown when you call up a help screen.

However for those times when you are looking for a specific file it might well prove invaluable. ●

HardPak

Pluses

- ▲ Spectacularly small
- ▲ Faster than M: drive
- ▲ Easy to fit

Minuses

- ▼ Difficult to use with a mouse or RS232
- ▼ Drive names are confusing

Ease of use	4/5
Documentation	3/5
Features	4/5
Performance	5/5

8000 Plus value verdict	16/20

Why a hard disc?

To those who have never used a hard disc it might be difficult to imagine what real value they are. To those used to having a hard disc it is difficult to imagine life without it – almost as difficult as remembering life before the PCW.

In the world of the paperless office, long dreamed of by the Amstrad organisation, the real problem is that although you do manage to unclutter your desk of large amounts of paper, at the same time you are cluttering it up with large numbers of floppy discs.

For a start there is your 'boot-up' or 'start of day' disc (always by far the easiest disc to lose). Using a hard disc means that no longer do you need to worry about such mundane matters – just switch on the PCW and CP/M or LocoScript 2 are loaded immediately.

Those really organised people who have PROFILE.SUB files that transfer all their favourite programs and utilities into M drive for easy access can save themselves several minutes in starting up. All their programs (not just their favourite ones) are instantly available on the hard disc.

There is no time lost having to load overlay files into the M drive (see Speed is of the Essence box) and there is no lost time poring through the disc box looking for the right program disc.

However, the start up or program discs are the least of the problem for the average PCW owner who can easily acquire literally hundreds of data discs.

If you are really organised you will colour code and carefully annotate every disc, so that you can lay your hands on any file in a moment. If you are like most people, you just spend a couple of hours going through 15 discs looking for the letter to the bank.

So imagine every file you have in one place and you begin to see already how it can save you time. If you've saved the file it has to be somewhere on your hard disc.

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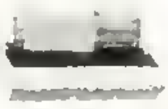

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COMPUTER CLUB

The Good Club Guide

All over the country, PCW owners are getting together on a regular basis to swap ideas, knowledge and information about their machines. PCW User groups, or clubs as they are better known, are springing up everywhere – as are enquiries from prospective members about how to find them. This month, we've put together a list of some the UK's more prominent clubs. Most of the clubs included operate on a part-time basis, with meetings taking place in the evenings at local halls or in the homes of club members. It is, therefore, advisable to make initial contact by post.

Some clubs operate on a purely postal basis, sending their members a regular newsletter with details of the postal services they offer. As for the cost of joining a club, it varies. Many groups charge an annual rate covering all meetings, while others charge a nominal fee each time they get together. On the whole, the financial outlay is minimal for the benefits which club-goers enjoy; tips, advice, services such as disc copying and laser printing – the list is endless.

The selection below is by no means exhaustive – there are many clubs which operate unbeknown to the the 8000 Plus Club News Desk. If your club is missing from the list, let us know. We will be only too pleased to tell others about you. Send details to: Club News, 8000 Plus, 30 Monmouth Street, Bath BA1 2BW.

Ground Floor User Group
Holme Street, Hebden Bridge
West Yorkshire

Fee: subscription - £10.00 per annum or £1.00 per meeting. Discounts for the non-waged.
Frequency of meetings: once a month
Enquiries: Jae Campbell (0422) 844991

Retford PCW User Group
14 Machin Close, Tuxford, Nr Newark
Nottinghamshire NG22 0JZ

Fee: subscription - £10.00 per annum
Frequency of meetings: once a month
Enquiries: Paul Tew (0777) 870038

CP/M and MS DOS User's Group
43 Birkbeck Road, Wimbledon,
London SW19 8NZ

Fee: subscription - £16.50 per annum, £20.50 overseas
Frequency of meetings: n/a – postal club
Enquiries: David Nesbitt (081) 543 0824

Hampshire PCW User's Group
Personal Computers, Unit 5 ,
Cable Street, Northam, Southampton
(address for meetings only)

Fee: subscription
Frequency of meetings: once a month
Enquiries: Paul Day (at the address above)

Hereford Computer Club
(nee Hereford Amstrad User Group)
18 Church Street, Hereford
Herefordshire HR1 2LR

Fee: subscription
Frequency of meetings: once a month
Enquiries: David Rose (0432 267213)

Teesside Amstrad User Group
8 Knayton Grove, Greenvale,
Stockton-on-Tees, Cleveland
TS19 7RW

Fee: subscription
Frequency of meetings: once a month
Enquiries: Gladys Baker (0642) 580018

M25 User Group
58 Islip Gardens Northolt
Middlesex UB5 5BY

Fee: £1.00 per meeting
Frequency of meetings: once a month
Enquiries: Tony Brown (081) 841 3666 Ken Ritchie (0992) 583744

Littlemore Amstrad PCW User Group
Peers School (Adult Education Centre), Littlemore, Oxford

Fee: subscription - £8.00 per annum
Frequency of meetings: once monthly, during term time
Enquiries: R G Hughes (0865) 242720

The Worldwide Amstrad Computer Club (WACCI)
9 South Close Twickenham TW2 5JE

Fee: subscription - £18.00 per annum UK, £27.00 Europe, £36.00 overseas
Frequency of meetings: n/a – postal club
Enquiries: Steve Williams (above address)

Calling all clubs

Every month, Club News receives enquiries from readers wondering if there is a club in their area. So, if you run or attend a club in any of the following locations, write and tell us.

Current areas of 'clublessness' are:

Aberdare
Ashtead
Berwick-upon-Tweed
Bishopton
Blackpool
Co. Antrim
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Are you a recent reader of 8000 Plus? Or have you missed out on someof the earlier issues and want to catch up? We have limited quantities of our back issues listed below. The prices include a nominal 25p postage. Remember, all issues contain excellent TipOff sections and the selection of BASIC listings, plus the other regulars.

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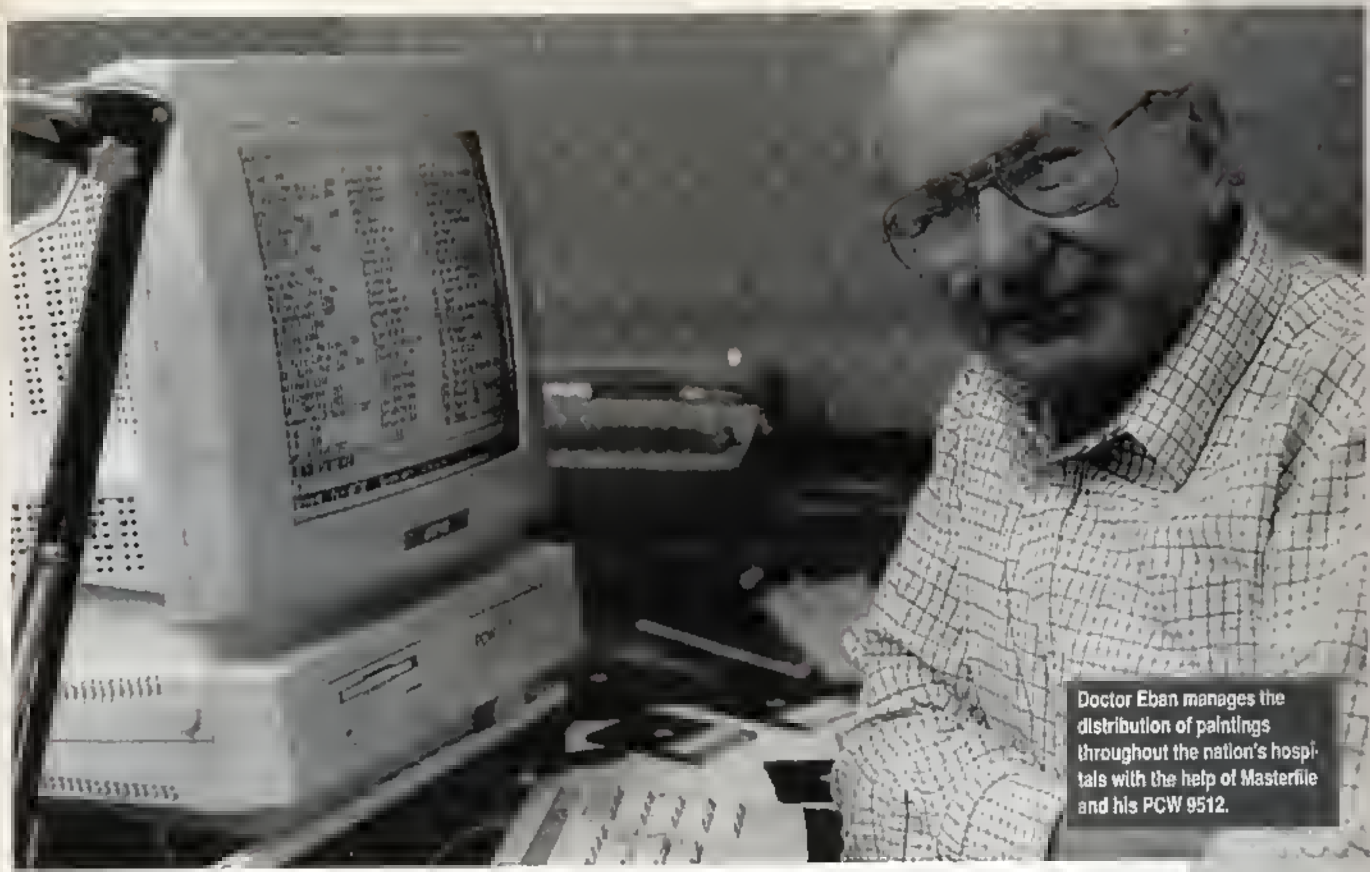
Proprietor: MJ Cooper.



Doctor Eban manages the distribution of paintings throughout the nation's hospitals with the help of Masterfile and his PCW 9512.

Room with a View

Hospitals and modern art seem unusual bedfellows; Sophie Lankenau visited one collection of paintings which is viewed strictly by appointment only

When Doctor Raphael Eban retired from his job at Ealing Hospital two years ago, it was in order to start work all over again. A long and illustrious career as a diagnostic radiologist may have come to an end, but when the time came for him to hang up his stethoscope, the doctor was asked what he wanted for a retirement present. "A computer," he replied simply to the amazement of his colleagues. And he got it.

Doctor Eban now lives in a quiet Oxfordshire village, where the sleepy silence is disturbed only by the singing of the birds and the clattering of fingers on a keyboard. The doctor is acting director of a nationwide charity called Paintings in Hospitals. He spends his time managing an art collection, which is distributed among a number of British hospitals, with the help of a very competent personal assistant – a PCW 9512. Doctor Eban had become acquainted with the PCW at Ealing Hospital, where he used a 9512 to handle all his administrative work. At the same time, he was also involved with Paintings in Hospitals.

"The charity was getting very complex in terms of administration," Doctor Eban told us. "It was clear that we needed some kind of computerised system to help us keep track of the collection. Other members of the group were worried that it would cost too much to install a system, but I told them that I could do it for about £500. I don't think they believed me, but I told them to leave it to me. I got to work with the PCW, and began looking for a database which could handle the task."

Paintings for decorating

The charity owns 1187 paintings, which it lends to hospitals all over the country. "It's a bit like a library," Doctor Eban told us. "We have to keep track of all the paintings, call them back in and redistribute them, buy some more in and sell some off to boost funds. On a national scale, that's a big organisational task."

The doctor's experience with the PCW in his job had only really included word processing. When it came to finding a suitable database for his work with the charity, his first choice was LocoFile. "I found LocoFile totally impenetrable," he laughed. "You have one flat file and one card for one thing. You look at the screen and you can't read it for all the commands. I kept coming up against the dreaded syntax error and I just couldn't go any further."

It was 8000 Plus which saved the day. "I noticed the tutorial series on Masterfile," said Dr Eban, "and the program looked rather good. I was stuck in a rut with LocoFile, so I thought I'd try Masterfile instead. It has taken me three months of hard work to find my way around it."

The results have made the time spent in learning his way aroung the program well worth it.

"The first thing which impressed me about Masterfile was that it has a very fast and easy search facility. If you want to find out how many paintings you have by a certain artist, you just key in the name and the program starts looking. Then, you might want to find out exactly where they are, what the catalogue number is and so on. It's really very easy once you know how," he explained.

With the basics firmly in his grasp, Doctor Eban then had to think about ➤

Masterclass revisited

Masterfile 8000 is one of the most popular databases in existence for the PCW. It is available from Campbell Systems (their 'phone number is 0378 77762/3) for £49.95. 8000 Plus carried a full 4-part tutorial series on Masterfile beginning in issue 42.

Public hanging

Paintings in Hospitals concerns itself only with the works of British contemporary artists. Each work is an original. Hospitals within a 20 mile radius of London make their selections at an annual exhibition. This is held at the Kind Edward Hospital Fund Centre, 126 Albert Street, NW1. There are usually several hospitals competing for the more popular pictures but a complex ballot system ensures that most demands are met.

what he really needed from a database. "The main thing for me was that I needed to know about paintings," he told us. "The second thing was that I needed to find a way of displaying everything I knew about a painting on a file card. The next step was to consider exactly what I needed to know about a given painting. I managed to get hold of a collector's specification sheet which I used as a template for my records. Essentially, what my records tell me is the name of a painting and its artist, the size, the kind – whether it's a watercolour or an oil – where it came from, how much it costs, its insurance value and, lastly, its history. By that, I mean how many hospitals have had it on loan and how popular it is."

Inside information

The database currently holds the details of about 250 paintings. With the amount of information needed to complete just one record, building it up is a lengthy and time-consuming process. However, once it is all there, it becomes a powerful source of reference.

"Not only can you ask information about one painting," explained Doctor Eban, "but you can also turn the search around and find out about one hospital. You might want to know what, say, Hammersmith hospital has got at the moment, or all the paintings which we have ever sent there. Masterfile is very good at a global search like that."

"I can also get a list of all the paintings which are insured for over £500, or whatever figure you choose, so you can get an idea of the current value of the collection," he continued.

The hospital file contains 'financial and transactional' information. By a series of simple keypresses, Masterfile can show details of the hospital's record. "All that means is that we can find out if an invoice has been paid, if any paintings have ever been lost by that hospital," he explained. "Many hospitals actually have their own art committees, so we don't encounter too many problems with 'losing' paintings."

Likes and dislikes

Was there anything about Masterfile which the doctor did not like? "There's nothing to dislike about it; the only annoying thing is that loading the thing up is quite a slow business, and changing files can take time. My artist's file is up to about 47k now, so it's not really surprising!"

"The only other thing is the manual. Whoever wrote it knew the subject so well, that they forgot to write it for idiots. I am helping the two ladies in the office to learn LocoScript, and I write out instructions which say things like 'Now press [ENTER], now press [RETURN]', and that is the way I would have liked to have learnt about Masterfile. All the information is in the manual, if you go away and work at it, but, my goodness, you do have to work at it!"

Doctor Eban is currently considering changing word processors, from LocoScript to Tasword. 'Somebody recommended it to me, so I thought I'd try it out. I'm not sure that it will allow me to have such efficient file management as LocoScript, but I'll have to wait and see."

Horses for courses

In the meantime, the Doctor is concentrating all his energy into finishing the database. "I suppose the best way to look at a database is in terms of how it compares to old shoe boxes," he laughed. "You will find everything you need in a shoe-box, but it will take you all day to track it down. So, even though it is taking me ages to complete this database by myself, it will be saving me time in the long run!"

Not everyone, it has to be said, initially shared the Doctor's faith in the PCW when he made it known that the 9512 was going to help him with his work.

"Someone at the charity actually said to me, 'You'll never do it with one of those things!'. I turned to her and I said, 'When you take the kids to school, you don't do it in a Porsche; you take them in a beaten up old Morris Minor'. What I meant was, that you pick the right tools for the right job."

"If you look at the new, so-called 'sophisticated' technology," he continued, "you'll find that the word 'sophisticated' often means 'too complex for its purpose'. If you're a soldier and you get a sophisticated gun, you'll find that it will go wrong when you are at ground level; the sand gets into it. There's alot to be said for being wary of high technology; I have generally found it to be the case that the more basic the equipment, the more user friendly it is anyway." The future of this charity for lending modern works of art to hospitals looks rosy. With the organisation well under control in the hands of Doctor Eban and his PCW, there seems no reason why the collection should not continue to expand, and the work of Paintings in Hospitals extend into more and more hospitals. "I enjoyed my career," commented Doctor Eban, "and now I'm enjoying my work with the charity. I am lucky to have the spare time, and the resources, to help other people – and I intend to keep on doing it for as long as I can." ●

Charity begins in hospital

Paintings in Hospitals is not a new charity. It has been running for nearly 30 years, and has almost 1,300 paintings in its collection.

The charity buys all kinds of paintings, from valuable work by famous painters, to the work of young artists. "We're very keen to encourage youngsters," Doctor Eban told us, "by going around the art schools looking for young talent and buying up the work. When it is displayed in hospitals, it gets exposed to a very wide audience."

A hospital will usually borrow a minimum of ten paintings from the charity. A nominal fee of £5 - £10 per year is charged for each painting, and hospitals will generally keep the same collection for four years. The paintings are then recalled, and re-distributed to other hospitals.

"It is quite a simple idea," Doctor Eban told us, "but it's a very good one. If we can help to brighten up the stay of patients in hospital by giving them something beautiful to look at, then it is a worthwhile activity. It puts real live paintings, oils and watercolours - not reproductions - where people can see them. The Arts Council does the same sort of thing, but the charge they make to the hospitals is greater than ours."

When a very valuable painting comes into the collection, the charity has to make a decision as to whether it should be displayed in a hospital, or sold.

Doctor Raphael Eban, carrying on the work of Paintings in Hospitals begun by Sheridan Russell 30 years ago

"We had such a painting last year. We knew that it would fetch about £30,000, which could enable us to buy a whole host of other paintings to distribute. We decided to sell it in the end, the theory being that it was better to capitalise on some of our valuable old paintings to buy non-valuable new ones. One of the paintings which was bought when the charity was set up 30 years ago have now become worth a lot of money; the process is self-generating, if you like, because there is a steady stream of work in the collection which will be of value after a number of years."

The charity holds an exhibition once a year, to raise funds and to promote awareness of the organisation. Representatives from hospitals attend the exhibition to see what is on offer, then may go on to request the loan of a certain painting.

Although the charity is the only one of its kind, it is quite small. "The only problem we really have," Doctor Eban told us, "is that we are an amateur charity that needs to get professional. Using the PCW is one step towards improving things, but we've still got a long way to go."

If you would like to find out more about the charity, write to Paintings in Hospitals, c/o Samaritan Hospital, Marylebone Road, London NW1 5YE. They can be contacted on the number 071 723 7422.

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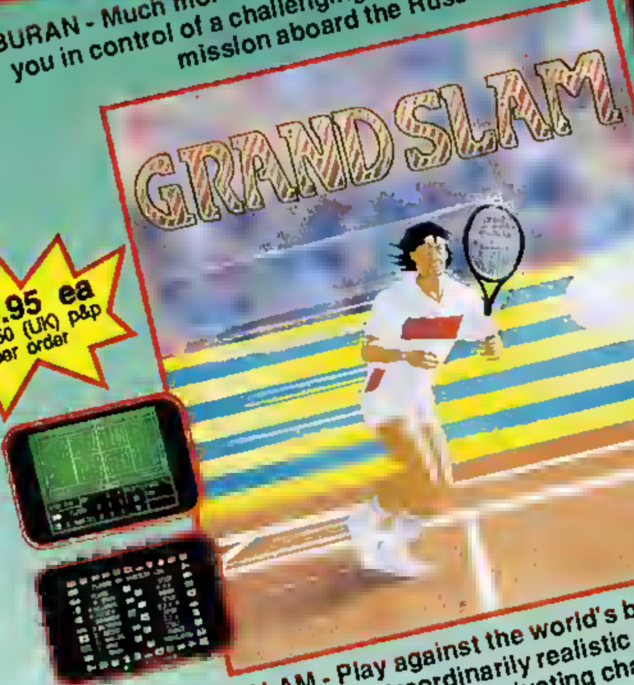

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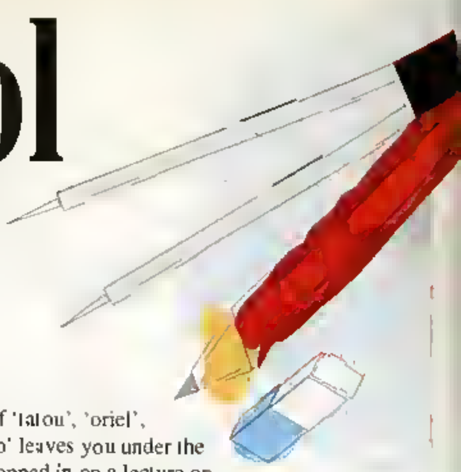
Back to School



This month, we look at two educational software packages which take the terror out of learning Maths and English

Crossgrid

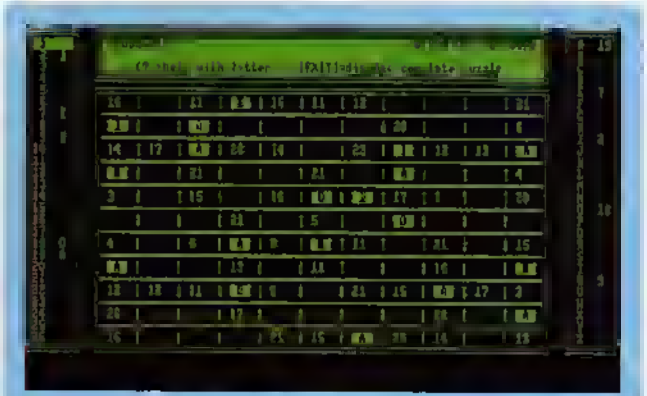
£14.95 ● DGC ● 0274 636475

'Crossword puzzles without clues' is the promise on the packaging of educational software producer DGC's latest offering, Crossgrid. This is an education in itself; solving a crossword without clues is as amorphous a task as driving a car without wheels.

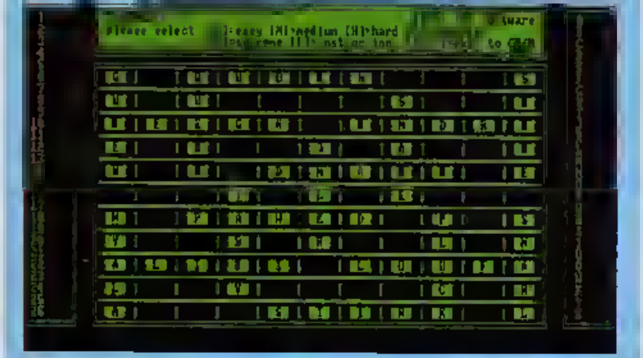
All is revealed as soon as the program is loaded from a CP/M-booted machine. Crossgrid is essentially a numerical teaser, where numbers represent letters of the alphabet on a crossword grid. All you have to do is to examine the number sequences and guess which number represents which letter. In the margin next to the grid there is a column of numbers, each of which represents a different letter.

To 'guess' a letter you simply go to the number underneath which you think a letter is hiding and type it in. Correct identification instantly changes every occurence of the number on the grid to the letter. There are varying degrees of play. For the lower levels ('easy', 'medium' or 'hard') the grid appears with the vowels already revealed. All the words contain five letters, so once a few vowels have been sprinkled around, the task should be easy. Or so you might think.

Some words hardly trip off the tongue in everyday conversation. The 'easy' grid has reasonably familiar words such as 'quota', 'rural' and 'brawn' – perhaps not the vocabulary of the 'younger children' at whom the program is partly directed but certainly within the grasp of those in their early teens. In the 'medium' level, things begin to change. The appearence of 'tatou', 'oriel', 'sajou', 'volti' and 'dsomo' leaves you under the impression that you've dropped in on a lecture on international cultural studies. When you are faced with 'mugil', 'solah', 'sudak', 'loess' and 'dryas', some of the simpler words from the 'hard' level you become convinced that you are.



The opening screen of a challenge at 'easy' level comes complete with all the vowels in postiion. Your job is to fill in the gaps



A completed 'supreme' level grid. With no vowels to help you, and no indication of whether you've guessed a letter correctly, this one is tricky

Having said that, because there are no 'clues' for the words, you don't really have to be familiar with their meanings. Indeed, in the solution of one or two other puzzles, you often find that these words have formed themselves. A misplaced sense of achievement is yours for a few seconds, when you see that you have produced 'coign', 'secco' and 'voile' with no effort at all.

Help is always at hand as well. By entering a [?] at an unknown number, the letter which it represents is instantly revealed and inserted on to the grid in all the appropriate places.

Creme de la creme

The top two levels of play (champion and supreme) are not for the fainthearted. At champion level, you have no vowels to help you on the path to a solution. Faced with a gridful of seventeen five-number 'words', the task seems almost insurmountable.

There are two ways to approach it. The first is to look at the sequences to find patterns of letters. Vowels have a habit of appearing as second letters, or in a pattern separated by one consonant. Finding one such sequence means that you only have to have five guesses at the identity of a number, and a solution is found. You can then fill the vowel-punctuated skeleton in the same way as you could for the previous levels of play. By the way, the words at champion level are also suitably obscure unless 'tucum', 'sigla', 'pogge' or 'capoc' are part of your everyday language.

Supreme level is quite a different matter. Again, you do not have vowels to guide you. But that's nothing compared to the other obstacle facing you.

"Don't tell me I'm wrong"

This time, when you guess the identity of the number, there is no decisive 'beep' to tell you if your choice is wrong. Instead, the program takes your choice of letter and imposes it on to the grid, whether it is right or wrong. You continue until it is clear that the choice of letter is incorrect. You can then change your mind by selecting the number again in the margin and pressing the spacebar to cancel your choice, allowing you to replace it with another letter.

Crossgrid has, in fact, few failings. The only thing it lacks, perhaps, is an element of competitiveness. True, it is intended as an educational package rather than as a game but play could have been spiced up further by the inclusion of time limits or some kind of 'reward' or bonus for identifying all the letters without recourse to the 'help with letter' option.

It is also very rewarding to complete the grid without one false identification, a task often achievable at 'easy' or 'medium' levels of play. These minor criticisms did nothing, however, to reduce the challenge laid down by Crossgrid. The puzzle is versatile, and above all, it is totally addictive – the ultimate proof of a good package.

Crossgrid

Pluses

- ▲ Easy to install
- ▲ Variety of challenge levels
- ▲ Ideal for lateral thinkers
- ▲ Totally addictive

Minuses

- ▼ No competitive element
- ▼ Some very obscure words

Ease of use	5/5
Addictiveness	5/5
Documentation	4/5
8000 Plus Value Verdict	14/15

Ultimate Sums

£14.95 ● DGC ● 0274 636475

Learning 'tables' was surely one of the most loathsome tasks ever to burden young children in their schooldays, probably even more hateful than those infamous school dinners. You can't help wondering, when you experiment with DGC Software's Ultimate Sums, that a little imagination could have gone a long way in making mathematics a thing to tolerate rather that dread.

Imaginative presentation and delivery are precisely the tools employed in Ultimate Sums, resulting in something of a turnaround for the learning process as a whole.

It is not only 'tables' which are dealt with in Ultimate Sums. There are all the basics such as addition, subtraction, and division and, for the more enterprising student, squares, cubes, square roots and cube roots.

Sumthing different

The 'sums' are played on a noughts and crosses grid – or OXO grid as the documentation prefers to call it. The documentation (all on disc incidentally), is well worth taking a look at before you begin. This is not because the program is hard to understand or operate, but simply because there is a great deal on offer here in terms of levels of difficulty and kinds of play.

Loading the program is simple enough, satisfying one of the first requirements of any educational software program. Any youngster who knows the alphabet will, with CP/M loaded, be able to type in 'sums' at the a> prompt and wait for the program to load.

Starting at level one (of eight) will have you tackling very simple addition of numerals below ten. The noughts and crosses grid is filled with numbers and the program asks you to make your 'move' on the square by typing in the relevant number.

You are then asked to provide the answer to a sum (2+3 and 1+2 are among the more testing examples). The correct response earns you a large tick on the screen, made up of the word 'correct' repeated 20 times. Incorrect replies produce a less impressive cross on the screen, using the word 'wrong'.

Depending on your answer, the number on the grid is either replaced by a nought or a cross. The idea is to complete a vertical, horizontal or diagonal line of correct answers (noughts) to 'win' the game. You can then repeat the game, or move on to another challenge.

Play attention!

There are many features to keep infant attention firmly on the screen in this package. The very first is the fact that you are asked for your name at the outset. You are then addressed by name in every question or message thereafter. This personal touch could do a lot to encourage the very young, who will immediately feel that the tasks they have to carry out are being asked of them by a friend, rather than a complex piece of software.

The second is an optional 'joke' selection. When a sum is correctly solved, a joke trickles on to the screen from right to left at a reasonable reading pace for young players. The 'punchline' is delivered by pressing another key.

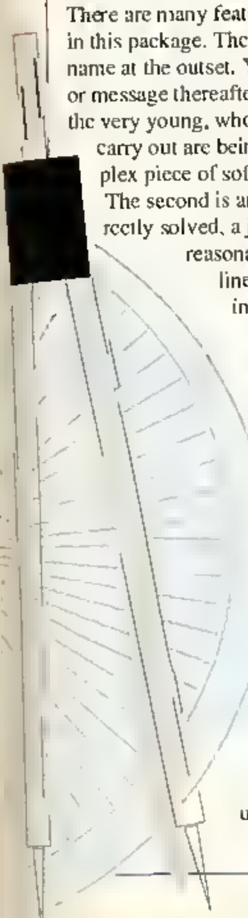
This idea of reward is a good one, although when you've been playing for a while, some old chestnuts do seem to appear all too frequently.

The one about 'Give me a sentence with the word antidotes in it'- answer, 'My auntie dotes on me' - will not be an after dinner favourite when you've seen it three or four times.

The program allows up to eight players to participate in a round of play, all with individual ability levels and an optional timer setting. This could prove invaluable for teachers with limited hardware resources at school, who will be able to 'share' one machine between a number of participating youngsters.

It also encourages a healthy competitive element, with the age old problem of peer rivalry being turned to advantage.

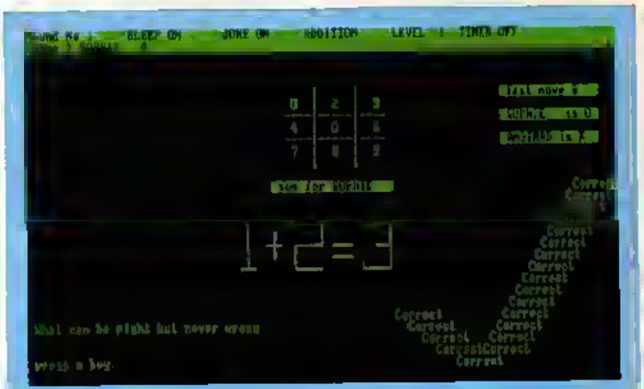
Ultimate Sums does not stop at simple problem solving. If you change discipline or difficulty level, then you are in for something of a challenge. Level five transports you mercilessly from the comfort of 2x3 up to the dizzy heights of 369+144.



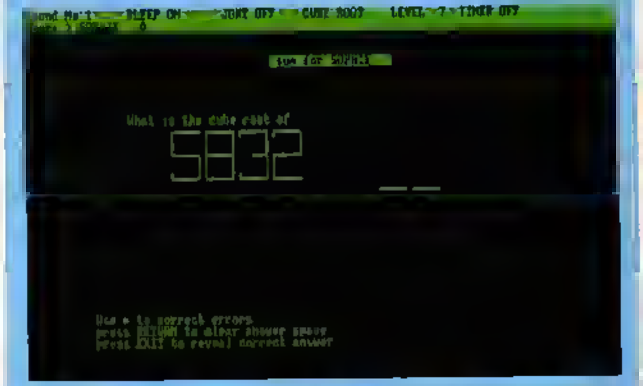
What's the score?

The program also keeps score sheets, a bonus for teachers or parents who want to check a child's progress without having to stand over them. This also means that the player is allowed time to work out an answer, unless of course the timer is selected. The score sheet can be printed out at the end of a session and kept for future reference.

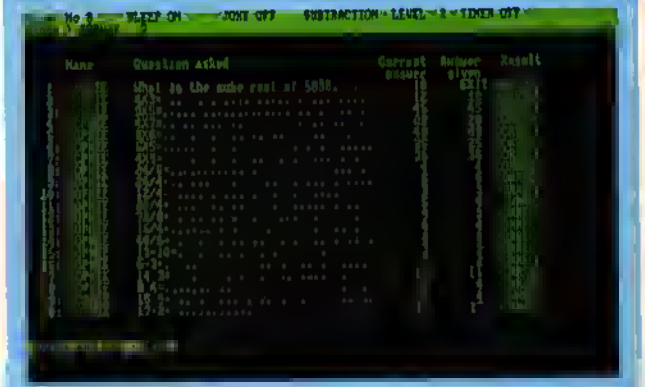
Ultimate Sums is an original, innovative way to encourage your children to learn. Not only that, it is extraordinarily good value for money. The range of difficulty levels means that the program can be of use to the very young and the A Level mathematician alike - and you can be sure that it will keep both groups entertained for hours.



Level on in the addition game. The idea is to play noughts and crosses with the machine by solving sums. Wrong answers give the machine the next move. The answer to the joke, by the way, is an angle!



At high levels in the cube root puzzle, things begin to get a bit tricky. The range of ability levels means that whole families can use the program



Score sheets can be printed out for reference purposes. This means that you can leave a child to work on their own, then check performance later

Ultimate Sums

Pluses

- ▲ Will appeal to all age groups
- ▲ Facility to print out score sheets
- ▲ Great way to learn an unpopular subject

Minuses

- ▼ Challenges are a bit slow to load

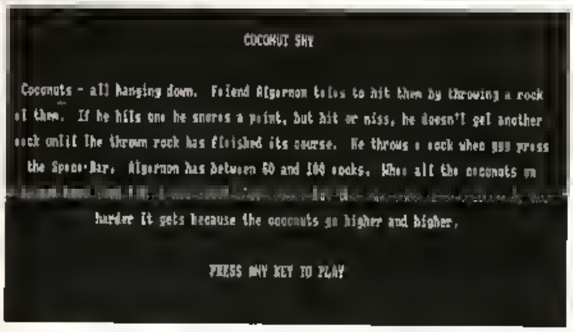
Ease of Use	4/5
Challenge	5/5
Interactiveness	5/5

8000 Plus Value Verdict	14/15

Listings

Fancy your chances on the coconut shy? Find out how good your aim really is with this month's listings game.

Nuts.bas by A.R. Tutcher



COCONUT SHY

Coconuts - all hanging down. Friend Algernon tries to hit them by throwing a rock at them. If he hits one he scores a point, but hit or miss, he doesn't get another rock until the thrown rock has finished its course. He throws a rock when you press the Space-Bar. Algernon has between 60 and 100 rocks. When all the coconuts on [illegible] harder it gets because the coconuts go higher and higher.

PRESS ANY KEY TO PLAY

Algernon, the famed coconut thrower, is introduced

Here's a question for you, folks : how do you manage to get a coconut out of a coconut tree? It may sound like a strange question with nothing whatsoever to do with your usual Listings spot, but, in fact, there are three possibilities. The first is to climb the tree – not advisable, since they don't have any branches. The second is to get an outrageously long stick, and knock them off – this is called the sensible approach. The third is to run around like a madman beneath them, throwing a stone skywards and hoping that you eventually hit your target.

If this sounds like the kind of activity you enjoy, then you will probably appreciate this month's listing.

The game is called, appropriately enough, Nuts, but whether this refers to the coconuts, or the state of mind of the little man is unclear. The man sprints across the screen throwing rocks at the coconuts which are dangling alluringly above his head; they're actually hanging from strings of differing lengths rather than in their natural habitat. The running figure is called, oddly enough, Algernon. Algernon's role in life is to knock down as many coconuts as he

```
10 REM NUTS by ART
20 DIM leg$(2),wire(89,2):hiscore=0:e$=CHR$(27):cls$=e$+"E"+e$+"H"             0956
30 u$="_":ul$=STRING$(84,u$)                                                    18ED
40 p$="PLAY AGAIN (Y/N)?":con$=CHR$(10)+STRING$(4,8)                            0AE3
50 leg$(0)=CHR$(47)+u$+CHR$(149)+u$:leg$(1)=CHR$(149)+u$+CHR$(92)+u$            1525
60 body$=CHR$(188)+CHR$(143)+"  ":head$=" "+CHR$(127)+"  "                      1869
70 DEF FNat$(x,y)=e$+"Y"+CHR$(32+y)+CHR$(32+x)                                  125D
80 DEF FNcen$(y)=FNat$((90-(LEN(b$)+LEN(bb$)))\2,y)+b$+bb$                      1008
90 DEF FNal$(x,y,l)=FNat$(x,y)+head$+con$+body$+con$+leg$(l)                    16FE
100 DEF FNch$(x,y)=FNat$(x,y)+CHR$(188)+CHR$(8)+CHR$(10)+CHR$(32)               1A20
110 DEF FNva$(x,y)=FNat$(x,y)+"    "+con$+"    "+con$+"____"                    196C
                                                                                1846
```

The program is initialised above. Algernon himself is actually defined as a series of characters.

```
130 PRINT cls$:y=0:WHILE y<20:READ y,b$,bb$:PRINT FNcen$(y):WEND                1E42
140 k$="":WHILE k$="":r=RND:k$=INKEY$:WEND:                                     1512
```

The instructions are printed out onto the screen in lines 130 to 140.

```
150 shy=INT(RND*40)+60:score=0:scr=18:PRINT cls$;e$+"f"                         1B81
160 FOR n=0 TO 89:wire(n,1)=0:wire(n,2)=2:NEXT                                  15B5
170 throw=1:l=1:rise=0:k$=""                                                    0D2D
180 scr=scr-2:qty=INT(RND*9)+6:PRINT cls$;FNat$(3,2)ul$;FNat$(3,28)ul$;         20AC
190 PRINT FNat$(35,1)"Hiscore = ";hiscore;FNat$(5,1)"Score = ";score;           2008
200 PRINT FNat$(71,1)"Shies left = ";shy;                                       1183
210 FOR n=1 TO qty                                                              08EE
220 wix=INT(RND*80)+5:IF wire(wix,1)=1 THEN GOTO 220                            1833
230 wire(wix,1)=1:wiy=INT(RND*7):wire(wix,2)=wiy+scr:FOR y=3 TO (wiy+scr)       27C9
```

The game variables are set up and the actual screen is drawn.

can. What the player must do is time each of his throws by pressing the space bar.

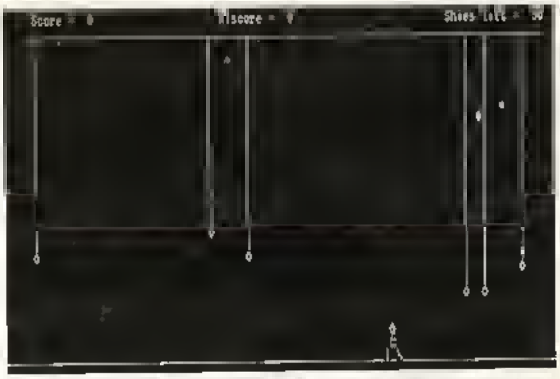
Timing is absolutely crucial, and the game is far more tricky than it sounds. Once the stone has disappeared from the screen Algernon is immediately provided with a new one.

The coconuts are hanging at various heights and the object is not to beat the clock, but to hit as many coconuts as you can before running out of stones. If you are good enough to clear the first screen, you go onto the next level.

The screen is more or less the same except the coconuts are in new positions. To make things more difficult, they are also higher on each screen.

Moving images are still quite a novelty on the PCW, but that is not the only impressive aspect of this program. What is really unusual is the attention to detail. We've found here at 8000 Plus that many commercially produced programs are less user-friendly than this particular program.

The instructions, for example, are thoughtfully included at the beginning of the program. The game also manages to end gracefully. A banner saying "Game over" appears, and you are asked if you want to play again. It even keeps track of the high score – a nice touch to a very professional program.●



Here is Algernon sprinting maniacally across the screen from right to left. Just press the space bar and he'll fire a stone into the air!

```
240 PRINT FNat$(wix,y)CHR$(149):NEXT:PRINT FNat$(wix,y)CHR$(187):NEXT   22AA
250 y=26                                                                0302
260 FOR x=85 TO 1 STEP -1:ON throw GOSUB 360,390:IF shy=0 THEN GOTO 290 2037
270 IF qty=0 THEN GOTO 160                                              0BB9
```

The game play happens here; a subroutine is used to throw the stone.

```
280 PRINT FNal$(x,y,l):l=l+(l=1):NEXT:PRINT FNva$(x,y):GOTO 250          1EC6
290 b$=" GAME ":bb$="OVER ":IF score>hiscore THEN hiscore=score          1F78
300 PRINT FNat$(45,1)hiscore;e$+"p";FNcen$(y-1);e$+"q":PRINT FNva$(x,y)  1FB7
310 FOR n=1 TO 17:x=51-n:body$=" "+CHR$(143)+" "+MID$(p$,18-n,1)         16EB
320 PRINT FNal$(x,y,l);l=1+(l=1):NEXT:x=x-1:PRINT FNva$(x,y)             1CE6
330 k$="":WHILE k$="" OR (k$<>"Y" AND k$<>"N"):k$=UPPER$(INKEY$):WEND    1C99
340 body$=CHR$(188)+CHR$(143)+"  ":IF k$="Y" THEN GOTO 150               161B
350 PRINT cls$;e$+"e";e$+"q":END                                         0C35
360 k$=INKEY$:IF k$<>" "THEN RETURN:REM Space-bar or not?                1A71
370 throw=2:body$=" "+CHR$(143)+"  ":head$=CHR$(188)+CHR$(127)+"  "      15AC
380 rise=1:RETURN                                                        0964
390 IF rise=1 THEN stx=x:head$=" "+CHR$(127)+"  ":yy=25:rise=0           1AF0
400 PRINT FNch$(stx,yy):yy=yy-1:IF yy<>wire(stx,2)THEN RETURN            2335
410 score=score-(wire(stx,1)=1)                                          0FCF
420 qty=qty+(wire(stx,1)=1):PRINT FNat$(13,1)score                       1A3D
430 PRINT FNat$(stx,yy+1)" ":IF wire(stx,1)=1 THEN wire(stx,1)=0         1E32
440 shy=shy-1:PRINT FNat$(84,1)shy                                       10C1
```

The game ends on line 350. Line 360 is the space bar selection.
The rest of the code, from line 370 to line 450 ,is dedicated to the throw itself.

```
450 throw=1:k$="":body$=CHR$(188)+CHR$(143)+"  ":RETURN                   165E
460 DATA 2,"COCONUT ","SHY"                                               0A4F
470 DATA 6,"Coconuts - all hanging down."                                 1396
480 DATA "  Friend Algernon tries to hit them by throwing a rock"         2160
490 DATA 8,"at them.  If he hits one he scores a point, "                 1A6E
500 DATA "but hit or miss, he doesn't get another"                        19C2
510 DATA 10,"rock until the thrown rock has finished its course.  "       21F2
520 DATA "He throws a rock when you press"                                15F4
530 DATA 12,"the Space-Bar.  Algernon has between 60 and 100 rocks.  "    1F26
540 DATA "When all the coconuts on"                                       11CE
550 DATA 14,"a screen have been hit, a new batch will arrive "            1D96
560 DATA "but the more screens are cleared, the"                          1853
570 DATA 16,"harder it gets because ","the coconuts go higher and higher."2381
580 DATA 20,"PRESS ANY ","KEY TO PLAY"                                    1153
```

The data above is used to print out the original message on the screen shown on the preceding page.

Beginners' Corner

So what exactly is in a BASIC program? What makes it print messages onto the screen? And how does it work out all of those complicated sums? If these are the sort of questions that spring to mind when you see a BASIC program listing, then don't worry – you've come to the right page.

Perhaps your aim is to write your own programs. Or maybe you would just like to understand how it all works. Whichever way you look at it, BASIC programming is a habit well worth cultivating. It can provide you with hours of fun, and the end result is a better understanding of how your PCW works; hopefully you will come out of it with a few useful programs as well.

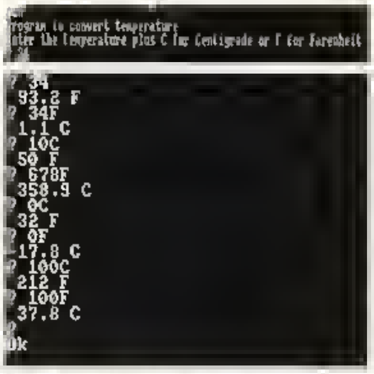
All sorts of BASIC tricks and tips are to be gleaned from just examining other peoples' methods. There is certainly no shortage of material to choose from. In fact, this is part of the problem. Many programs are far too long for a beginner to cope with.

Short and sweet

A simple 10-line program is far more suitable than a fifty line listing, and Keith Simon's temperature converter fits the bill admirably. It converts a temperature in degrees Farenheit to degrees Centigrade, or vice versa.

A conversion program is one of the simplest to write since there are only four stages involved. The first stage is to print a message on the screen. This should tell the user what the program is all about. Secondly, the user needs to enter in some information. In our example, this would be the temperature.

The third stage is to perform the calculation and then, finally, the last stage is to print out the results. Many programs like to give you the option of re-running the program, and our temperature converter is no exception. This is achieved by using what most programmers call a loop, which allows you to go back to the beginning of a series of instructions repeatedly. But more of that later. First, let's get the example program running



```
run
rogram to convert temperature
nter the temperature plus C for Centigrade or F for Farenheit
? 34
? 34
 93.2 F
? 34F
 1.1 C
? 10C
 50 F
? 678F
 358.9 C
? 0C
 32 F
? 0F
-17.8 C
? 100C
 212 F
? 100F
 37.8 C
?
Ok
```

Keith Simons' short and simple program can convert temperatures from Centigrade to Farenheit in a flash

Run along

To set up a new program, it has to be typed in. In the box on the following page, you will find detailed instructions on how to go about this. Fortunately, you only need to type it in once before saving it onto a disc.

When you run the program, a message should immediately appear on the screen. It actually tells you that the program is a temperature converter, and then asks you to enter a temperature. (If this doesn't happen, then you should check your program carefully for any typing mistakes.)

The screen message is how this program begins, so it should come as no surprise to find that the instructions are the first two lines of the program, lines 10 and 20. The actual command is a simple one to learn. To print text onto the screen , the command **PRINT** is followed by the message in quotes. The program then waits for you to type in a response. It expects this to be a number followed by either the letter 'C', to denote Centigrade, or 'F' for Farenheit.

Working it out

When information needs to be entered in at the keyboard, the command used is **INPUT**, as you can see on line 30 of our example. The temperature keyed in is saved in the PCW memory and referred to from then on as **temp$**. There is a very simple reason for this. Every time you run the program, the actual temperature will be different, so the obvious solution is to refer to this value by name throughout the program.

The listing then has all the information it needs to begin the calculation, but don't expect there to be any obvious pause in events. The PCW is capable of solving the most complicated of mathematical problems before you can bat an eyelid. This ability is precisely what makes computers such powerful allies.

But how does BASIC deal with calculations? Well, it has already saved the temperature. It now has to decide whether the conversion is from Farenheit to Centigrade or vice versa - and then perform the conversion.

The value saved under the name **temp$** is what, in programming jargon, is called a string. In other words, it is a

Book look!

To really get to grips with BASIC, you will eventually need a book to guide you through the pitfalls. One of the best on the market is Program your PCW by Ian Sinclair (£8.50) from Glentop (071 953 9292). We reviewed this way back in issue 4 of 8000 Plus on page 50. Read, as they say, all about it!

Temperature Converter by Keith Simons

```
10 PRINT "Program to convert temperature"

20 PRINT "Enter the temperature plus C for Centigrade or F for Farenheit"

30 INPUT temp$

40 IF UPPER$(RIGHT$(temp$,1))="F" THEN newtemp=5/9*(VAL(temp$) - 32):
                                                type$="C":GOTO 60

50 type$ = "F": newtemp=32+9/5*VAL(temp$)

60 IF LEN(temp$) THEN PRINT ROUND(newtemp,1);type$:GOTO 30
```

This program converts temperatures from Centigrade to Farenheit and vice versa. The eight lines of code encapsulate a logical sequence of events that can be summerised as follows:

Lines 10 and 20:	The first two lines of the program simply print a message on the screen.
Line 30:	This line allows the user to enter in a temperature.
Line 40:	This line runs a test to see if the conversion is from Farenheit to Centigrade. If it is it performs the conversion, then skips straight to line 60. If not the program continues onto line 50.
Line 50 :	This line performs the conversion from Centigrade to Farenheit.
Line 60:	The final line prints out the result.

sequence of characters. The program, therefore, has to know whether the last character of **temp$** is an 'F' or a 'C'. To do this, line 40 has the instruction **IF UPPER$(RIGHT$(temp$,1)="F"**. Translated into English, this means, take one character from the end of **temp$** and convert it to an uppercase character. Then test to see if this character is "F".

All change

If the answer is yes, the program converts the temperature from Farenheit to Centigrade. This is taken care of by the rest of line 40 which consists of three separate steps. Firstly, the numerical part of **temp$** is found. This is multiplied by 5, divided by 9 - and 32 is subtracted from the result. This converts it to Centigrade. Then the **type$** is set to 'C'; finally, the program jumps to line 60.

The condition on line 40 may not, of course, be true. If the character is not found to be "F", then the program ignores the rest of the line and instead carries straight on to line 50. The conversion is assumed to be from Centigrade to Farenheit and the **type$** is set to "F". The calculation is performed by finding the numerical part of the **temp$**, multiplying that by 9 and then dividing the result by 5 and adding 32.

The final line prints out the results. However, before it does this, the program checks that you did actually enter a value in the first place. To end the program, you would have pressed [RETURN] way back on line 10. The program has ignored this possibility up until now, but it must check before printing out the result. If you had pressed [RETURN], the length of the character string **temp$**, or **LEN(temp$)**, would be 0 (zero), and the program would finish.

If this is not the case, the program will finish the instructions on line 60. This involves printing the converted temperature (**newtemp**) followed by either a C or an F (**type$**). The program then goes back to the beginning with the command **GOTO 30**. The whole process is continued with a new value for **temp$** read in each time.

The next step

Although these commands are very precise, there are, in fact, many other ways of writing this program. The level of detail required in a computer program is, for many people, something of a revelation, and it is one of the reasons why there will always be a high demand for professional programmers.

If, however, you enjoy puzzle solving and want something of a challenge, then programming can be a very rewarding hobby. For those who really get bitten by the programming bug, there are always new tricks to discover. Who knows? You could be a listings contributer in the making. ●

How to type in a listing

Whether you want to throw stones at coconuts or, on a more serious note, convert temperatures from Centigrade to Farenheit, the one thing that all of our listings have in common is that you have to type them in. This involves a little familiarity with the idiosyncracies of BASIC.

The first thing is to load BASIC itself. Start up with your CP/M master disc, or put it into the drive and press [SHIFT] [EXTRA] [EXIT]. Typing in BASIC should bring up a short message on the screen about BASIC, followed by the ok prompt.

BASIC is now ready and waiting for your instructions. It has some precise rules about how these instructions should be set out, so they must be copied exactly as given.

To type in a program, just start copying it line for line from the listing. Don't type in the column on the right hand side; the instructions there are included for checking purposes only. We do re-print the checking program from time to time, but it is not an essential part of the process.

Check each line carefully before pressing [RETURN]. If you spot a mistake, move to it using the cursor keys. It can then be edited using the [DEL] keys and typing in the correct version. Then press [RETURN].

The entire listing is checked at the end by typing LIST. You can use the [f5] key to stop the screen scrolling. If you notice any mistakes at this stage, type in EDIT followed by the line number. The line can then be corrected as before. When everything appears to be in order, you can test the program by typing in the RUN command.

The chances are that there will still be a few lingering mistakes. Error messages can help to locate the problem, but if not, some careful checking is called for. Edit the program as before and test it once more.

As soon as the program is running smoothly, it should be saved by typing in SAVE" followed by the name of the program. Once it is saved on disc, it can be re-run at any time by simply loading up BASIC as before, typing LOAD" and the name of the file. It is then run as usual by entering the RUN command. To exit from BASIC, all you have to do is to key in SYSTEM. This will take you back to the original CP/M prompt.

... and finally

Remember last month's listing, Catloco.bas? We showed you how to re-organise your LocoScript files with the aid of John Gledhill's program.

The listing was designed to make a catalogue of your LocoScript files complete with the few lines of identity text allowed each file. All the user had to do was to keep putting the discs in the drive, and the program did the rest.

The convenience of the program is precisely what made it such a welcome contribution to our Listings pages. We did, however, have one small quibble with the program. Those of you who are now using Catloco.bas will no doubt agree that the facility to choose whether to catalogue a B drive or an A drive disc would be a useful addition.

Last month's version would only catalogue a disc in the current drive. To catalogue *both* A and B drive discs meant running the program twice and effectively ending up with two separate catalogues.

When John Gledhill originally wrote the program, he was operating on a single drive machine. Having upgraded his PCW to two drives, John, decided to do something about this constraint. This is the result.

If you add these extra lines to your existing version of Catloco.bas, they will allow you to choose which disc you would like to read from. You simply add the prefix **b:** or **a:** to your disc name. If no prefix is given, the program assumes that you wish to catalogue the contents of a disc in the current drive.

Here, then, are three extra lines for you to type in:

```
45 OPTION FILES "0a"
175 PRINT "You may change drive
    by including a:, b: or m: in front
    of the disc name."
225 IF MID$(dn$,2,1)=":" THEN
    OPTION FILES LEFT$(dn$,1)
    :dn$=MID$ (dn$,3)
```

The following lines need to be ammended :

```
610 OPTION FILES "0a"
670 OPTION FILES "0a"
930 OPTION FILES "0a"
```

To change lines in a program that has already been saved, simply load the BASIC file in the normal way and then start typing in the new lines. Press [RETURN] only at the end of a line, and make sure that the line numbers are exactly the same as those given here.

When you have finished typing in these six lines, type in **LIST**. You should find that the first three lines have been entered into the program and the last three have overwritten the original lines.

You can renumber the lines by typing in **RENUM**. Don't forget to save the new version by entering **SAVE "Catloco**. The program is now ready to run (type in **RUN**).

I've got a luverly bunch

Next time you find yourself on a beach lined with coconut palms, think of your poor chums back home. Send them a coconut; all you have to do is write on the address, stick a stamp on it and it will wing its way to its destination - if you can find a postbox big enough. Straight up!

Leaps and bounds

Ever wondered why the line numbers in a BASIC program go up in tens? Well, it's all down to the art of programming. If you want to add a line between say, line 10 and line 20, then it can be called line 15.

Line 1.5, on the other hand, could be described as a BASIC faux pas.

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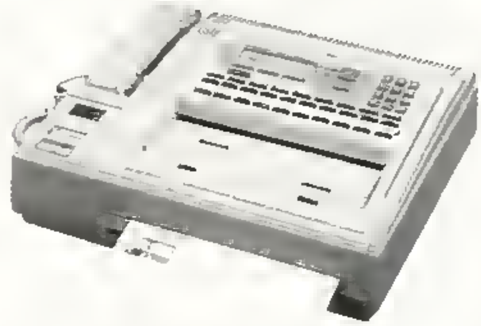

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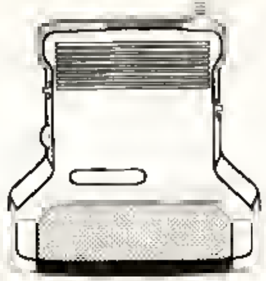

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LANGFORD

A page in the company
of David Langford

Half a Century

Fifty issues of *8000 Plus*, and I've appeared in them all, sometimes twice. It's like being the Oldest Inhabitant, with a long white beard constantly getting entangled in the space bar, and several address marks missing from my forebrain.

Pausing only to open the congratulatory magnum of champagne which Future Publishing did not send (*Get in the queue, Matey*), I poked through my dusty archives of the magazine's prehistory, stretching back through eras of quill pens and clay tablets to the beginning of all things in, actually, 1986.

How embarrassing

Here's the yellowed printout of that first column, when I had no idea how the magazine would eventually look or what my page would even be called. Having recently read the unfunniest funny book in literary history, I hastily pinched its title - *Diary of a PCW Nobody* - in a bout of sheer desperation.

(In case you're wondering, incidentally, copyright law turns a blind eye here: I keep being fooled by new books which recycle other authors' titles, but no one ever complains. Thus *Double, Double* is a 1950 whodunnit by Ellery Queen, and a 1969 SF novel by John Brunner — both of them quoting a 1606 hit by Bill Shakespeare.)

Luckily my first title never actually reached print: editor Ben Taylor (or maybe it was Simon Williams with whom Ben kept swapping, much to everyone's confusion, in the first year) schizophrenically changed it to *Langford's Diary* on the Opening Menu and *Langford's Printout* within. It stayed as the latter for quite some time; in fact, until Rob Ainsley grabbed the editorial hotseat at issue 20, and presumably thought long and hard about the fact that no printout was involved: I was sending in the stuff on disc.

Not again

So, as of issue 21, I've lurked under the scarcely modest or self-effacing column title *Langford*. This is none of my doing. I am shy and retiring, but as Tolkien wrote, "Do not meddle in the affairs of Editors, for they are subtle and quick to anger."

Indeed, Ben once became subtly miffed when I included some rude cracks about overpricing of small-press books — little knowing his ability to vanish into a phone booth and assume his alter-ego as a director of Kerosina Books, whose productions were (and are) very nice but not all that underpriced....

Next in my cobwebbed files comes a stack of letters from Rob Ainsley, some very strange indeed: "A mate of mine has named his house 'Freepost' and swears he knows a Swedish secretary called Per Pro."

My favourite is Rob's list of editorial woes. "Number one is the old LocoSpell article, cataloguing its bizarre replacements in a wide-eyed first person narrative. Second is probably Case in Point, invariably restricted to LocoScript. Extra naff points are notched up for pet PCW names ('I have a new girlfriend. She's called Joyce. My wife wonders who she can be,' etc.), wally club activities ('My PCW is invaluable in the running of my Civil War Re-Enactment Society. I keep a costume list on file....') and daft mistakes ('I use Logoscript exclusively....' 'I am a regular reader of *Amstrad PCW Plus*....')."

Rogue's gallery

Along came issue 31 and spanking-new editor Steve Patient, whose total commitment to Amstrad technology was shown by the fact that all his notes to me were scribbled in smeary pencil on both sides of Future Publishing compliments slips.

"We are very bored with the bad cartoon of you which fails to decorate your column," he grumbled in early 1989, and those strange pictures of me up there have become stranger ever since.

Steve liked to cheer the hearts of depressed authors whenever possible: "Dear whingeing sod, We're paid to put gratuitous words on paper, and have a quota to meet. Those inserted into your text were just a few I had left over.... Are we still paying you? We are? Who wants to read about *statistics* for Ishtar's sake? I wouldn't read it and I have to."

Not forgetting that memorable occasion when I hopefully suggested doing an article on assembler and, specifically, on an alternative SUBMIT.COM I'd written which could be used on write-protected start of day discs.... "This sounds like a thoroughly useful piece of programming," he boomed. "Pity I can't see any way to use it."

It was Steve who published my super-pedantic column on How To Punctuate Real Good (issue 36), which produced more correspondence than any other. A friendly ex-newspaperman wrote in to explain the original reason why tabloid papers break stories into the shortest possible sentences and paragraphs: in hot-metal typesetting, the cutting to fit was most easily done by removing whole paragraphs of type. So they had to be short.

Er ... yes

Or to put it another way, that slightly breathless style whose hallmark is a new paragraph for every sentence stems from a now bygone technology, even though all today's major papers are electronically edited on DTP systems which can reformat stories with the utmost ease. I might have guessed.

At around this time I put out some feelers about titivating my *8000 Plus* columns for collected book publication....

"They are brilliant, but too ephemeral and magazine-ish," replied a typical publisher.

"But when I've rewritten them, they will be not only bookish but even more brilliant," I modestly pointed out.

"Perhaps, but all the PCW owners will have read them in *8000 Plus* and no one else will be interested."

"Um, I could rewrite them further to make them of wide general interest...."

"In that case the book would not have any identifiable market at all."

The message, or so it would appear, is perfectly clear. If you like these columns, don't throw away your old copies. Also, you are not an identifiable market. Sorry about that.

Then, as of issue 39, Sharon Bradley became editor and... (*Yes?*)... er, everyone lived (*Yes?*) er, happily ever after. (*Good. I'm glad we got that sorted out. Copy in as normal next month, Dave. Okay? -Ed.*) ●

TIPOFFS

The pages that always go with a bang!

Can't launch yourself into LocoScript? Find BASIC a damp squib? Lost that spark in CP/M? Come to Tipoffs, the pages full of fireworks. There are pyrotechnics this month in LocoScript, LocoFile, Protext, BASIC, Mini Office and SuperCalc.

Do you have a cracker of a tip? The best win hard cash – £30 is already rocketing to Basil Pigg of Bath, the guy who sent a sparkling way to make Protext ASCII files. So here's the plot: send your tips to us at *Tipoffs, Freepost, 8000 Plus, 30 Monmouth St, Bath BA1 2XF*, and fire others with enthusiasm!

Basic Tips

LocoScript has no facility to print just part of the text on a page, but you can do it by making that text belong to a page by itself. Here's what to do.

1. Move to the line above the section to be printed and press [EOL] then [ALT] [RETURN].
2. Then move to the last line of the section and press [EOL] then [ALT] [RETURN].
3. Make a note of which page LocoScript thinks the section is – you can see what it is by moving the cursor into it and looking at the top right of the screen where the page number is displayed for you.
4. Now press [EXIT] and 'Finish edit'.
5. Back at the disc manager screen, press **p** for Print.
6. From the print menu select 'print part of document' or 'print some pages' using the cursor keys and the [+] setkey.
7. Give the start and end page as the one you marked out. Press [ENTER] and it prints out.
9. Remember to take out the end-of-page markers (shown as down-facing arrows) in the document.

Ron Sloggett, Fleet, Hants

(Not) rubbish tip

It's a good idea to keep a disposable file of length 8k or so on each data disc in LocoScript, called RUBBISH or ERASE.ME or something. Then, when you get the dreaded message that you've run out of space on the disc and must erase some files before being able to save the file you're working on, you have something you can safely erase.

Stephen Holloway, Reading, Berks

Spectral analysis

I have a number of documents on cassette in Tasword on a 48k Spectrum. Can I transfer them to the PCW, or will I have to type them all out again?

Nigel Bovey, Liverpool L8

8000 Plus: It is possible to link up the Spectrum and the PCW, but I'm afraid it needs rather a lot of expensive kit.

For the PCW you need an RS232 interface to plug into the back (about £60 from most mail order advertiser in 8000 Plus); for the Spectrum you need a similar device (try your local computer shop – say £25) and a cable to link the two (another £10, say). Then, having spent nearly £100, you need to know how to transfer the documents, which is too involved to describe here!

Perhaps the best thing to do is point you in the direction of a Spectrum User Club which can maybe lend you some of the gear and give you advice. Try D Garner on 0582 472067.

Dr No

In September's Tipoffs, John Hudson refers to DR Draw in connection with the use of a plotter.

Unfortunately, Digital Research told me in March this year that they no longer sell or support the program. The software may still be available from some places, but users will have to solve any technical queries by themselves.

R Ledger, Blackburn, Lancs

Protext to ASCII

A problem with Protext is that it can't produce sensible ASCII files (if you use the PRINTF command, you get a [RETURN] put at the end of each line – a 'page image' file, useless for most purposes).

But here's a good way to convert Protext files to 'plain text' ASCII format. Type in the following lines and save as a normal document called ASCII.BAS on a disc which also has BASIC.COM (copied from your CP/M discs).

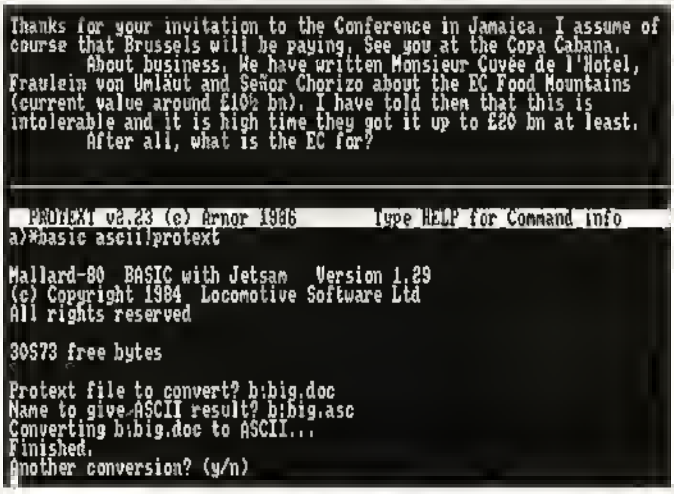
```
10    INPUT "Protext file to convert? ", in$
20    INPUT "Name to give ASCII result? ", out$
30    OPEN "I",1,in$ : OPEN "O",2,out$
40    PRINT "Converting "; in$; " to ASCII..."
50    WHILE NOT EOF(1)
60    a$=INPUT$(1,#1)
70    IF a$<>CHR$(13) THEN 110
80    b$=INPUT$(1,#1)
90    IF b$=CHR$(138) THEN b$="" : a$=""
100   PRINT #2,a$; b$; : GOTO 130
110   IF a$>CHR$(127) THEN a$="*"
120   PRINT #2,a$;
130   WEND : CLOSE : PRINT "Finished."
140   PRINT "Another conversion? (y/n)"
150   a$=INPUT$(1) : IF UPPER$(a$)="Y" THEN 10
160   SYSTEM
```

To convert a file called say BIG.DOC to ASCII form, here's what to do.

1. In Protext, insert your disc with BASIC.COM and ASCII.BAS on it into the appropriate drive, and type ***basic ascii!protext** [RETURN]
2. When prompted for the file to convert, insert the disc with the file to be converted and give the name BIG.DOC or whatever it is.
3. Give a suitable name for an ASCII version, such as BIG.ASC.
4. To convert another file, press y; to return to Protext, insert your Protext startup disc and press any other letter.

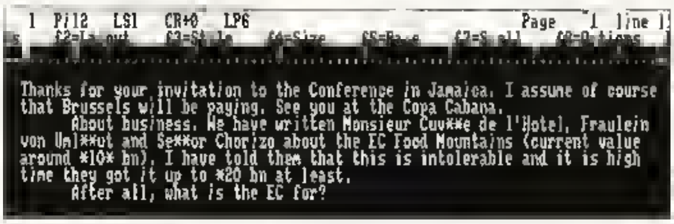
Expect it to take about 1 minute per 1000 words. Now BIG.ASC is in ASCII format and can be sensibly inserted into LocoScript, NewWord or WordStar documents. Note that all funny characters that are not ASCII like £, ©, é, â, ø, and so on, or printer codes, have all come out as * or **. This is so that you can search through and find where any non-ASCII characters are in the converted result. If you want any other character instead of *, change line 110. If you want all non-ASCII characters simply stripped out, make the end of line 100 read a$="".

Basil Pigg, Bath, Avon



```
Thanks for your invitation to the Conference in Jamaica. I assume of
course that Brussels will be paying. See you at the Copa Cabana.
        About business. We have written Monsieur Cuvée de l'Hotel,
Fraulein von Umläut and Señor Chorizo about the EC Food Mountains
(current value around £10½ bn). I have told them that this is
intolerable and it is high time they got it up to £20 bn at least.
        After all, what is the EC for?

 PROTEXT v2.23 (c) Arnor 1986          Type HELP for Command info
a)*basic ascii!protext

Mallard-80  BASIC with Jetsam   Version 1.29
(c) Copyright 1984  Locomotive Software Ltd
All rights reserved

30573 free bytes

Protext file to convert? b:big.doc
Name to give ASCII result? b:big.asc
Converting b:big.doc to ASCII...
Finished.
Another conversion? (y/n)
```

A simple BASIC program can make turning Protext files into plain-text ASCII files as easy as this...



```
  1  P/12   LS1   CR+0   LP6                              Page   1  line 1
s   f2=Layout  f3=Style   f4=Size   f5=Page   f7=Spell   f8=Options

Thanks for your invitation to the Conference in Jamaica. I assume of course
that Brussels will be paying. See you at the Copa Cabana.
      About business. We have written Monsieur Cuv**e de l'Hotel, Fraulein
von Uml**ut and Se**or Chorizo about the EC Food Mountains (current value
around *10* bn). I have told them that this is intolerable and it is high
time they got it up to *20 bn at least.
      After all, what is the EC for?
```

...and you can insert the result into a LocoScript document using [f1]. Note how the funny foreign characters such as £ have come out as asterisks – and how the text has aligned sensibly with the new margins

Safe Ex

When is it safe to exit from a program? Is it necessary in Mini Office, for example, to exit all the way back to CP/M's A> prompt before switching off the machine?

J Webster, Borrowash, Derbys

8000 Plus: *If your program seems to do some writing to disc when you exit to CP/M (i.e. if the red light goes on and the disc whirrs) then you should always do this before resetting the machine.*

If it doesn't, then so long as you've saved any changes you've made to any file in a program, it is in general quite safe to take the disc out of the drive and press [SHIFT] [EXTRA] [EXIT] without having to exit back to the A> prompt (e.g. with Mini Office).

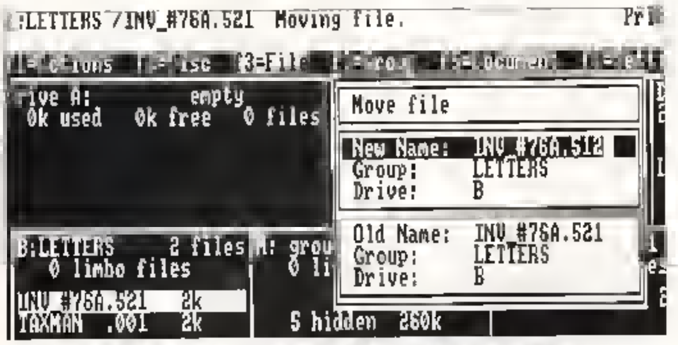
Name names

When renaming a document in LocoScript with a name similar to the old one, don't use 'Rename'. Instead use 'Move'. Whereas rename offers you a blank space to type the new title, move puts up the old name which you can edit, saving retyping. Of course, you don't actually move the file anywhere – it stays in the group.

To change, for example, INV_76A.521 to INV_76A.512, put the cursor over it in the disc manager. In LocoScript 2, press [f3] then **m** then [ENTER] twice; in LocoScript 1, press [f4] then [ENTER].

Edit the name to the new version and press [ENTER] again. The file stays in the group but is now renamed.

Alun Rees, Haverfordwest, Dyfed



```
:LETTERS /INV_#76A.521  Moving file.                    Pr
ive A:          empty        Move file
 0k used   0k free   0 files
                             New Name:   INV_#76A.512
                             Group:      LETTERS
                             Drive:      B
B:LETTERS    2 files M: grou Old Name:   INV_#76A.521
  0 limbo files           0 li Group:    LETTERS
                             Drive:      B
INV_#76A.521   2k
TAXMAN  .001   2k         S hidden  260k
```

'Move' Is easier for renaming than 'Rename' sometimes

Dislabelled rights

In answer to Mrs Hornby's query (Tipoffs, September) about multi-line fields in Mini Office's database, it is possible to print them out, either all or one by one. Suppose the address is field 3, with 5 lines. When preparing the report/label you specify 3.1 for the first line, 3.2 for the second and so on. They can be printed either underneath each other or all in one line.

D White, Brixham, Devon, and about 50 others

8000 Plus: *Thanks everyone – I should have known that myself as it is in the current version of the manual!*

BASIC tips

When I LIST a long BASIC listing, I can of course stop it to examine some lines by pressing [STOP]. But to look at other lines I have to LIST again. Is there a way round?

David Johnson, Glasgow

8000 Plus: *Yes. In BASIC, [f5] pauses any current operation – the running or listing of a program – and [f3] resumes. Here are some other useful BASIC quickies:*

1. The 'cursor left' key copies the last line.

2. Pressing [FIND] while editing moves the cursor to the next occurrence of the next character you press, eg [FIND]a goes to the next 'a'.

3. Pressing [CUT] deletes up to the next occurrence of the next character you press, eg. [CUT]a deletes everything from the cursor up to the next letter a.

4. Since [FIND] can't occur in BASIC program lines, [FIND][FIND] is a good way to jump to the end of a line.

5. Similarly [CUT][CUT] will quickly delete to the end of a line.

6. Pressing [+] switches between 'insert' and 'overwrite' modes of entry.

Memo demo

As Foreword, the text preparation program, can be installed as a background to LocoScript or CP/M (i.e. you can instantly switch between it and LocoScript or CP/M) it can be used very simply as a memo pad and/or card index, e.g. of addresses.

Having installed Foreword, switch into the Foreword mode and there is an empty display on which any notes can entered. At the end of the day, these can be printed out or saved as a Foreword file.

To create a card index, press [f3] from the memo pad and a new empty display appears. After the 1, type **Card Index** and then press [ALT] [RETURN] followed by the right cursor and [ENTER]. This creates a sub-unit A.

Press [ALT] [RETURN] and then [ENTER]; this creates a sub-unit B. Repeat until you get to sub-unit Z.

To enter data into a card (i.e. into a sub-unit) cursor back to the required letter and press [RETURN]. Now enter the required data – e.g. a name and address. When all the data for that card has been entered, cursor back up to the letter and press [-] (the set key, by the space baron the 8256/8512 or down at the bottom left of the 9512 keyboard) to hide the data. This isn't essential, but gives a less cluttered display. Repeat the procedure for entries to other cards. When all have been made, save as a Foreword file (as say INDEX.FW).

While in Foreword mode, switching between the Memo Pad and the Card Index is simple: [f4] takes you back from Card Index to Memo Pad and [f3] takes you forward from Memo Pad to Card Index. To use Foreword as a writing aid, simple step forward from the Card Index with [f3] to obtain another empty display.

Switch to LocoScript or CP/M now to run and programs as required. To use the Memo Pad/Card Index, switch back to Foreword and use [f3]/[f4] if required to find the required display. To look up a Card Index entry, cursor to the required letter and press [+] to show the data if it's hidden.

Once created, the Card Index file and Memo Pad file if created can be loaded at the start of day operation to be always available.

Derek Jacobs, Ruislip, Middlesex

Breakfast time

When copy-typing, it can be a problem having the original document in an upright position that's easy to copy from. One solution is to pay several pounds for a copy holder gadget of some sort – or, if you have a PCW8256 or 8512, to save the money and proceed as follows.

Set up the PCW so that the front of the printer faces you. Lift off the front lid of the printer (with the 'Amstrad' name plate). Insert a suitably sized (about A4) piece of cardboard vertically between the ribbon cassette and the casing of the printer. Now you can rest the page you're copying from against the card, and there you have it. The de luxe version incorporates a paper clip for limp paper or in case there's a draught.

A panel from a Weetabix carton is ideal for the purpose. This is what is called in computer circles a "cereal interface".

Mike Ninnim, Burnley, Lancs

8000 Plus: *In our trials, Sainsbury's 'Fruit and Fibre Flakes' seems to work well too, and is recommended for use with Apples or Apricots.*

FRUIT & FIBRE FLAKES

The printer of your PCW 8256/8512 can be used as a copy holder. Just remember to finish your breakfast first.

Disc runneth over

Please help! I have a LocoScript data disc on my PCW 8256 which is shown as having 88K used and 84K free. But on attempting to save my file I get a 'disc full' message. I have deleted all limbo and hidden files – everything except MANUSCRP.

If I upgrade to 512K memory, will my discs hold more?

Mr J Fraser, Fort William, Inverness-shire

8000 Plus: The problem is that, at 88K, your LocoScript file is far too big! When you edit a file in LocoScript, the old version is kept on file as a limbo file. This is what happens:

a) LocoScript reads off the file from disc into memory.

b) You edit the version in the memory and save it.

c) LocoScript writes this new version onto some free space on the disc, leaving the old one intact...

d) ...and only then, when the new version has been written, does it erase the old version (or rather, puts it into limbo).

If it didn't do things in this order, the new version of a file might be written over where some of the old file was on the disc, meaning you couldn't keep the previous version as a limbo file.

The upshot of this is that when you edit a file, LocoScript needs at least as much free space on the disc as the file is big. So 88K, being bigger than half the disc, can't be edited.

The longest you should ever have a file is about 10K. Long files are cumbersome, slow and cause problems with full discs. Split long files into chapters or sections.

But how do you split up your file, when any edit you try won't fit on the disc? Here's what to do. Make sure you have a blank formatted disc first – you're going to split off some of this huge document outa it.

1. Edit the file. Press [COPY] then [PAGE] three times then [CUT] then 0 (zero). The first three pages should be cut out (but saved to the memory temporarily – you can get them back later). Now finish editing; you should just be able to save this new shortened file to disc (if not, repeat the copy-cut business again with just one press of [PAGE] and end it with 1, not 0; if that still isn't enough, do it again with one press of page and end with 2; and so on).

2. Now insert your blank disc and create a new file, calling it MANUSCRP.1 or something. In the new file, press [PASTE]0 (and [PASTE]1 etc. if you needed to save more pages). The pages you cut are inserted. Finish editing.

3. Repeat steps 1 and 2 until you have split up MANUSCRP into several smaller files of about 8-10K each called MANUSCRP.1, MANUSCRP.2 etc. And don't work with such big files again!

Wheel power

I have a Thesis PS wheel that is supposed to print out in proportional spacing on my 9512. But what software do I need to be able to use it?

B Hughes, Gillingham, Kent

8000 Plus: LocoScript 2, which you have already! Here's what to do in detail:

1. Fit the daisywheel on the printer as follows. Pull back the lever on the left of the daisywheel, slip the old one out and drop the new one in. Push the lever back firmly, as far as it'll go (if it just prints dashes and slashes, you haven't pushed it far enough). The printer engages the new wheel with a click and a spin.

2. Add the Thesis wheel to the list of character styles that LocoScript knows about. Through [f6] 'Settings' in the disc manager, select 'new character style' and give the name as 'Thesis' and the pitch as 'PS'. Write it to the startup disc under SETTINGS.STD by following the prompts.

3. If you want a document to print out on the PS wheel, set it up through [f1] 'Document setup' and press [f6] 'Printing'. Set the option you want, 'Thesis', with the [+] key. [EXIT] back to the main document. If you set up a TEMPLATE.STD like this, then all documents in that group will print out on a PS wheel. Your document must have a (+PS) command in it at the start, or be set up to print in PS in the layouts.

4. When you come to print out one of these documents, you may be asked if you want to change from the current style (probably Prestige Pica 10) to that intended (Thesis), so take that option and the right style will be selected.

If you want to print a document set up for a normal wheel on a normal wheel, follow the converse of the procedure in 4.

If you try and print a document set up for one wheel on another it may well print out, but the results will look very odd.

Screen test

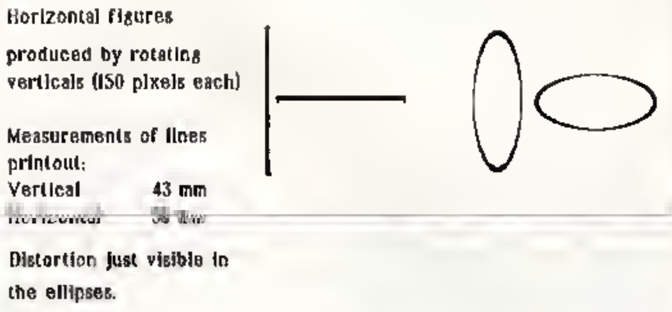
The graphics screen ratio on Micro Design is set at 1:0.936 – in other words, when you rotate something 90°, it distorts slightly. Can anyone come up with a way to make the ratio even?

A Jolly, West Wickham, Cambridge

8000 Plus: Well, trying to reset the screen aspect ratio is a bit of a red herring. Because of differences between the aspect ratio of 9 pin, 24 pin and laser printers, and the screen, you can never hope for some rotated shapes not to distort somewhere. (Look at the way the A4 page on Micro Design is a different shape sideways to right way up on screen). Also, some shapes will distort more than others. What Micro Design does is to base itself on circles, and to always think of the printed result. In other words, a circle may not look circular on screen, but it'll print out right on the printer you're using. This means inevitably that other shapes will distort when rotated.

A further point is that Micro Design works with pixels that are actually twice as high as they are wide, to make best use of the screen definition: this means that when you rotate something you lose information and hence a bit of definition.

So the basic answer is... no!



Horizontal figures

produced by rotating verticals (150 pixels each)

Measurements of lines printout:

Vertical 43 mm

Horizontal [illegible]

Distortion just visible in the ellipses.

Key facts

In a BASIC program I want to do certain things depending on whether the user presses certain keys. Please tell me how to do this.

H Morrissey, Cork, Eire

8000 Plus: You want a line like

```
10 PRINT "Press a key";
20 a$=INPUT$(1)
```

The PCW waits for a key to be pressed. When it has been pressed, you can test for the value of a$. Suppose you want to go to line 100 if the user hits a (or A), and 150 if they hit b (or B). You'd have:

```
30 IF a$="a" OR a$="A"
    THEN GOTO 100
40 IF a$="b" OR a$="B"
    THEN GOTO 150
```

Obviously some key presses aren't so easy to check. Suppose for example you want to go to line 100 if they've pressed [f1], and 150 if they've pressed [f3]. BASIC treats the [f1] key as being the character of code 26, and [f3] as the character of code 17. So you'd have:

```
30 IF a$=CHR$(26)
    THEN GOTO 100
40 IF a$=CHR$(17)
    THEN GOTO 150
```

In both the examples, a line like

```
50 GOTO 10
```

ensures that if they press something other than the desired key, they are asked again until they get it right.

Here's a full list of some keys and the characters they return when pressed. To test for [RETURN], for example, see if a$ equals CHR$(13).

[RETURN]	*13*
[STOP]	*13 (yes, same as [RETURN])*
[ENTER[	*13 (yes, 13 again)*
[EXIT]	*27*
[TAB]	*9*
[+]	*22*
[-]	*28*
[DEL] right	*7*
[DEL] left	*127*
[CAN]	*8*
[CUT]	*21*
[COPY]	*23*
[PASTE]	*23 (yes, same as [COPY])*
[EXCH][FIND]	*29*
[LINE][EOL[	*2*
[RELAY]	*18*
cursor up	*31*
cursor down	*30*
cursor left	*1*
cursor right	*6*
[f1][f2]	*26*
[f3][f4]	*17*
[f5][f6]	*19*
[f7][f8]	*16*

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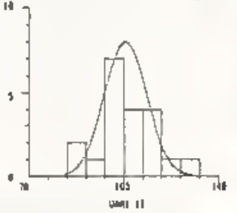

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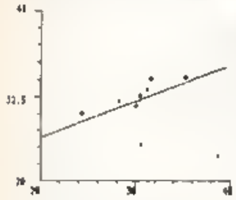

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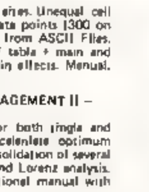

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Press up

This control panel map for Stop Press may be useful to users of this desktop publishing program.

David Part, London E1

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	Page	File Canvas	Copy	Flip Top to Bottom	Keyboard		Brush Spray	Mist Spray	Paint	Data	Define Window	Gridlock	Page Print	Black Ink	1
2	File	Cutout File	Enlarge x 2	Flip Left to Right	▨	Close text to file	Spray Size/ Line Thickness		Selected pattern	Pie Chart	Invert Window	Gridlock adjust	Multiple	White Ink	2
3	▨	▨	Shrink ÷ 2	▨	Loading Text from Disc Drive Select		Patterns		Cross-hairs On/Off	Histo-gram	Border window	Zoom	Printout	Inverse ink	3
4	▨	Load	Variable Stretch	Slip & Slide	CIDs On/Off		Box	Triangle	Circle	Line Graph	Border	Instant Erase	Print Canvas/ Window	▨	4
5	Save	Drive Select	▨	▨	CID Quantity		Ellipse	Line Drawing	3D Aid	▨	Page	▨	Paper Change Warning	▨	5
6	Drive Select	▨	Rotate 90°	Shadow	Drive Select	Loading Typeface	Outline	Solid Effect	Painted Effect	Auto Fill	Clear Window	Page Coordin-ates	Form Feed On/Off	Ghosting On/Off	6
7	▨	▨	Rotate 180°	▨	Typeface Designer	Typeface size	Dot Pattern Effect	Dot Pattern Mask		Auto Backdrop	Clear	▨	Printout Selection	Black Ghosting	7
8	Drive Select	Delete File	Rotate 270°	Smart Cut	Saving a Typeface		Symbol Position-ing	Pattern Pickup	Pattern Designer	▨	Page	Scanner	Parallel Port	White Ghosting	8

Mail order

When using LocoMail to output information from a LocoFile data file, you may wish to make several passes through the file changing only the ?; instructions. Once LocoMail has reached the end of the index being used, however, you are returned to the disc manager screen and have to start the merge afresh.

Normally setting to an index brings up the first record in the index. It is no use re-setting to the same index; this does not change the current record – otherwise a loop would never leave the first record.

In this case you can cheat by changing the index *twice*, first to another index then back to the original. You are then returned to the first record ready to search through again without having to re-merge.

J Goodacre, Leicester, Leics

A b... omission

In September's Tipoffs ('From A to B') you described how to use PIP to transfer files from a disc in the A to the B drive. Unfortunately it only seems to work for group 0. How can you transfer files from all groups?

Andrew Warner, Great Bookham, Surrey

***8000 Plus:** Well, it was described two pages later in the list of PIP options, but I suppose it wasn't too well signposted!*

*1. Run up CP/M as usual by pressing [SHIFT] [EXTRA] [EXIT], inserting your CP/M disc, and at the A> type **pip** [RETURN].*

2. Put the disc to copy from in the A drive and the one to copy to in the B drive. They must have been formatted in those drives of course.

*3. Type **b:[g0]=a:*.*[g0]** [RETURN]. This does group 0 files.*

*4. When it's finished, type **b:[g1]=a:\*.*[g1]** [RETURN]. This does group 1 files.*

*5. When it's finished, type **b:[g2]=a:\*.*[g2]** [RETURN]. This does group 2 files.*

6. ...and so on for each group number with files in.

If you want to copy limbo files, those for group 0 are in group 8, group 1 are in group 9, and so on up to group 7, which has limbo files in group 15.

Hope you find this is a bit more helpful.

Big BASIC

I have a very long listing which looks like it will be bigger than 31K – which is more than BASIC can take! What shall I do?

David Johnson, Glasgow

***8000 Plus:** In BASIC, several files can be chained together by the command CHAIN. Split the listing up into chunks, say PROG1.BAS and PROG2.BAS. To 'run' the second from the first put the command CHAIN "PROG2",,all (yes, two commas). This last bit makes sure all the values of the variables will be transferred intact to the second part.*

Trace relations

I use a mouse with Stop Press and Micro Design, and I would like to be able to trace line drawings for use in them. Is there a device I can fit to the mouse to let me do this, or will I have to buy an expensive scanner?

Ray O'Dent, London SE5

***8000 Plus:** There is a device like the one you describe. It's a small piece of clear plastic with cross wires on it that fixes onto your mouse via a piece of velcro, enabling you to trace line drawings with your mouse. Called (groan) 'Tracey', it costs £7.95 from SideWise, PO Box 4, Totnes, Devon TQ9 7EN.*

Swept away

Here are some additional tips to the article on Newsweep that appear in the September issue.

? is a HELP screen listing all the commands.

X is the command to EXIT to CP/M.

S calculates the space remaining on the disc currently logged. The documentation says this is prefaced by a disc reset so that S may be used after swopping discs; true, a reset is undertaken, but the directory in NSWP's memory is *not* replace by that from the newly loaded disc, so the screen display is a confusing amalgam of the free space on the new disc an the directory of the previous one. Attempts to access the files result in a 'Can't open file' message! Use only L to change discs.

C to copy supports an optional 'read after write' check or 'verify' in a way similar to PIP. Follow the destination name with a space and then V.

F to find a file in the directory is a real boon on well-filled discs as it saves all that scrolling and is simple to use because it acts like a *.* mask. Entering just one character moves you immediately to the first file with that initial letter. The more characters you specify, the more accurate the search.

Q is the command to squeeze as well as unsqueeze files. In either case, files must be tagged before squeezing.

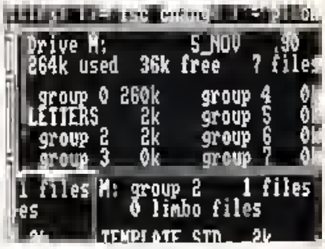
NSWP **.* as a 'sign on' command lists all groups from the outset – very useful for LocoScript discs. It can be 'switched off' with an **A0:*.*** mask or similar.

Malcolm Surl, Bodmin, Cornwall

***8000 Plus:** Because of space considerations the original article on Newsweep had to be brief and one or two things may have been subbed out – thanks for those additional points.*

Tasty dates

There's a handy little use for renaming the M drive in LocoScript. Just after starting up, move the cursor into a group in M somewhere, press [f2] (or [f5] if you have LocoScript 1) and select 'rename disc'. Give the name as the date, using underline characters ([SHIFT] hyphen) to separate words, such as **5_NOV.90**. This will be displayed all day on the disc management screen.

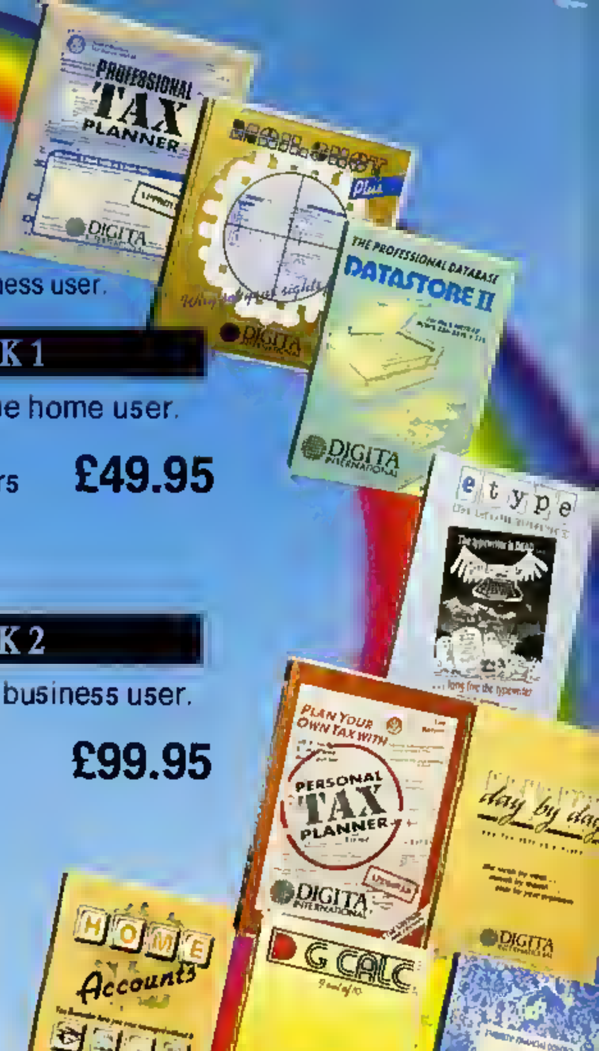


```
Drive M:             5_NOV   .90
264k used   36k free     7 files

  group 0 260k      group 4    0k
LETTERS     2k      group 5    0k
  group 2   2k      group 6    0k
  group 3   0k      group 7    0k

1 files M: group 2      1 files
es            0 limbo files
```

Remember, remember: but if you can't, LocoScript can remember the date for you

J Goodacre, Leicester, Leics

Distinctly Digita



Cleverly written and always favourably reviewed in the press,
Digita produces a range of powerful, low cost software for the home and business user.

DGPAYROLL PLUS

As per DGPayroll, but designed for the larger business with facilities for up to 999 employees.

£79.95

E-TYPE

Do you ever have to print names and addresses at awkward places on envelopes, or do you ever need to fill in tricky forms or invoices where the text has to be in exactly the right place? Usually you have to do it by hand, or get your trusty old typewriter out of the cupboard and dust it off. Well not anymore. The Emulated TYPEwriter transforms your computer and printer into a fully fledged typewriter, supporting bold, underline, italic and other type-styles. Because it can display and print text INSTANTLY you can line up your form, press Return and Space a few times to move to the correct place, and then start typing. Alternatively you can switch to line-by-line mode, which offers word-wrap, justification and proportional spacing, so that you can edit each line before it's printed.

£24.95

PERSONAL TAX PLANNER

Are you absolutely sure your taxman is doing his job correctly? Plan your own tax with ease, this menu-driven program will calculate your income tax liability (4 tax years included) and provide pertinent facts about your tax position. You can perform 'what-if?' calculation to discover ways to minimise your tax liability. In fact, the program will advise you on things such as, if you are a married man, whether it would be advantageous to have your wife's income taxed separately or not. At this price who knows, you will probably find that PTP will pay for itself in tax savings the first time you use it!

" STOP PRESS "
July '89 – PTP user receives tax refund of over £2,000!!

£24.95

SUPERTYPE II

Perhaps the only reasonable criticism of the Amstrad PCW might be the standard of printed output. Upgrade your printer with this clever software utility. The program will provide you with 8 radically different and professional typestyles giving your documents an original facelift. The ingenious thing about Supertype is that once you've established your favourite font on a disc, you won't even notice it working. You run your software in the normal way and everything willl be the same except when you print out. Supertype II works with LocoScript (up to version 2.18) and ANY OTHER suitable CP/M software.

£14.95

CLASSIC INVADERS

Escape from executive stress with the classic space invader game

£13.95

SPECIAL VALUE COMBO PACK 1

The complete package designed for the home user.
Contains: Datastore II, Supertype II,
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DG PAYROLL
DIGITA
TOTAL INTEGRATION
Business Controller
A NEW CONCEPT IN ACCOUNTING & FINANCIAL MANAGEMENT
DIGITA INTERNATIONAL
THE PROFESSIONAL DATABASE DATASTORE II
DIGITA INTERNATIONAL

DGPAYROLL

Designed for the small business and handling payroll problems for up to 20 employees, this program is simple to use being completely menu-driven and supported by comprehensive documentation and worked examples. Suitable for hourly/weekly/fortnightly/4-weekly/monthly paid employees, the program handles all calculations for pay, SSP and SMP, company and private pension schemes (fixed/percentage), payslip printing, printed records/reports and full payroll analysis. Complete user-control of PAYE, NI and SSP rates. You won't find any other program at this price which actually calculates the complicated SSP requirements! Printouts include P45, SSP Leavers, P14, P35, P60 as well as SSP1 (termination) and SSP1 (exclusion) details.

£39.95

BUSINESS CONTROLLER

A complete cashbook accounting system for the sole trader/partnership/limited company. Use the program to assist day-to-day book-keeping and VAT Returns, to complete End of Year Accounts if you wish. This program is simple to use, supported by an excellent manual with tutorial, meets legal requirements and will show the full financial state of your business. In addition to recording cash and bank transactions, the program will allow you to enter credit sales and purchases, and for all of these entries it will automatically complete double entry routines, to ensure your records are always in balance. Simple enough for the beginner, yet sufficiently powerful to grow with your business.

£69.95

DATASTORE II

Looking for fast access to stored information? Want to create customised reports, mailing lists for printing labels, office and personal records with NO technical knowledge? Researched, developed and written exclusively for the Amstrad PCW, this program will fully utilise the facilities of your computer. It makes an ideal partner for the novice or expert. Features include fast searching/sorting, calculation on fields, definable printing templates, ASCII export, 32 fields, 32,000 records, merging files and much more.

£39.95

Available to the trade from:
Digita, GEM, Greyhound,
HB Marketing, Lazer,
Leisuresoft, R & R, SDL.

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All software written in the UK. Prices include VAT & P & P (add £2.00 for export)

THE GOOD Software FILE

These pages provide a comprehensive guide to the Amstrad PCW software. Published in three monthly parts, this time it's the turn of Word Processors (including Desk Top Publishers), Accounts/Payroll packages and Utilities. We've set out to cover every important piece of software we could lay our hands on, and to give you enough information to decide whether they are suitable for you.

All software will run on both the 9512 and the 8000 series machines, though the former's daisywheel printer cannot print graphical output.

The selection isn't comprehensive, but the software listed here represents what we think is the best of that currently available.

As well as a brief summary of what they do, the main Plus and Minus points for each program are listed – Pluses have a ▲ by them, Minuses a ▼. Those we think are particularly noteworthy have a corner flash.

Have fun window shopping!

WORD PROCESSORS

PROTEXT/POCKET PROTEXT

£59.95/£29.95 • Arnor
0733 68909

POWERFUL

The best CP/M wordprocessor. Very fast at moving around large files, and packed with features. Works with key combinations rather than menus, but uses LocoScript keys too. Comes complete with a good spelling checker, a lightning fast word counter and a very powerful mailmerger. 'Pocket Protext' is a stripped down version – essentially the same word processing features, but no spell checker or mailmerger, and lacking one or two incidental facilities like two column printing. Specify which machine you have when buying.

PLUSES · MINUSES

- ▲ Complete with spelling checker/word counter
- ▲ Packed with features, eg. calculate facility, text editor for writing programs, 'print to screen' option etc.
- ▲ Lets you work with two documents at once
- ▲ You can do all of CP/M's functions without leaving Protext
- ▲ Very fast at moving around, doing exchanges and so on
- ▲ Extremely powerful and flexible mailmerger
- ▼ Forces you to learn another new set of control keys to use it
- ▼ Not as slick as LocoScript in its printer controls

TASWORD 8000

£24.95 • Tasman • 0532 438301 • 8000's only

Simplifies document planning by minimising dependency on layout procedures. Allows quick and easy access to parts of text by existence of a marker system. The 'Search' and 'Find/Replace' facilities are simple to use, but very thorough.

PLUSES · MINUSES

- ▲ Easy to use
- ▲ Excellent mailmerge and label-printing ability

EASY LABELLER

£29.95 (plus VAT) • M.A.S.S. • 0603 630768

Labelling program which stores your names and address list and will print out in label format selected items from it.

PLUSES · MINUSES

- ▲ Useful options like printing out current date
- ▲ Good search facilities
- ▲ Range of printing options will fit most stationery
- ▼ Data needs an entire disc to itself
- ▼ Data entry is slowed by constant returning to main menu

LOCOSCRIPT 2

£29.95 • Locomotive Software
0306 740606

GOOD VALUE

As bundled with new 9512, the new version of everyone's first word processor. If you know how LocoScript 1 works, you'll have minimal relearning to do, and it puts right (almost) all the defects of the old version at a rock bottom price. Greek and Cyrillic alphabets, and even lets you define up to sixteen characters of your own design.

PLUSES · MINUSES

- ▲ 'Find page' command makes moving around faster
- ▲ Superb range of foreign accents and symbols available
- ▲ Can now drive daisywheel and other printers
- ▲ Has DISCKIT's formatting and copying built into it
- ▲ New 300-page manual
- ▼ Mailmerger and spelling checker not included
- ▼ Inconvenient for regular CP/M users
- ▼ Still no word counter!
- ▼ Still slow at Find, Exchange and scrolling

LOCOSPELL

£19.95 • Locomotive/Amsoft • 0306 740606

The ultimate spelling checker for LocoScript users. It is run as a simple menu choice while you are editing a document normally, and you can check either an entire document or only a paragraph. When it finds an error, it suggests a correction. Reasonably fast, given LocoScript's inherent sloth.

PLUSES · MINUSES

- ▲ Runs totally from within LocoScript
- ▲ Can do small sections of a file
- ▲ Suggests alternatives for misspell words
- ▲ Reformats the text as it makes corrections
- ▲ Provides the much-missed LocoScript word counter
- ▼ Can't remove spellings you don't like
- ▼ The manual gets bogged down sometimes
- ▼ Slow at scrolling the dictionary window

LOCOMAIL

£29.95 • Locomotive/Amsoft
0306 740606

As a mailmerger for LocoScript, it's difficult to see how anything could be better than this. It runs directly from LocoScript, and can process any LocoScript commands. Has many advanced features and is highly recommended for all LocoScript users.

PLUSES · MINUSES

- ▲ You don't have to run it from CP/M
- ▲ Can print any LocoScript text formatting commands
- ▲ Can automatically rejustify paragraphs after insertion
- ▲ Can insert numeric calculations into letters
- ▲ Can read data from non-LocoScript (ie. ASCII) files
- ▲ Large manual, with example files on disc
- ▲ Powerful selection procedures – like a database
- ▼ Need separate program to sort and filter addresses before a print run

PROSPELL

£29.95 • Arnor • 0733 68909

A stand-alone spell checker for use with almost any wordprocessor that runs on the PCWs. Reads LocoScript, WordStar and ASCII files, and allows you to make corrections directly, view the context, change the dictionary etc. Specify which machine when buying.

PLUSES · MINUSES

- ▲ Checks LocoScript and WordStar documents directly.
- ▲ Displays the context of a suspect word
- ▲ Can edit misspellings directly from Prospell
- ▲ Anagram and crossword solvers too
- ▼ Processes files of 15K or more in sections

POCKET WORDSTAR

£49.95 • MicroPro/Davis Rubin • 0386 853610

For many business users, word processing means Word Star. Almost everything you could need in a text processor is here and despite the title this "Pocket" version has all the features of the original. Efficient and proven, but now showing its age and there are alternatives unless you are committed to WordStar already. £20 extra buys the De Luxe version with spell checker.

PLUSES · MINUSES

- ▲ Probably the world's most widely used word-processor
- ▲ Documentation is complex but well-structured
- ▲ Includes a mail merge utility
- ▲ Keystroke commands fully described on on-screen menus
- ▼ Doesn't make full use of the PCW keyboard and printer
- ▼ Page and margin formatting commands awkward to use

NEWWORD

£69.00 • NewStar Software • 0245 265017

NewWord exploits the WordStar market by doing the same job better. It uses much the same key commands as WordStar and will even edit documents prepared under WordStarComes with a spelling checker, and the on-screen help is slightly better than WordStar's, though the keystokes are still as obscure

PLUSES · MINUSES

- ▲ Does everything WordStar does, even reads WordStar files
- ▲ Spelling checker included
- ▲ Can un-erase words and lines
- ▲ Onscreen help better than WordStar's
- ▲ Full reformatting of text within mailmerger
- ▼ Weak on use of keypad and printer support
- ▼ Like WordStar, formatting troubles and obscure commands

LABEL PRINTER

£25.00 • Microdrow • 0622 685481

Very similar program to Easy Labeller if not quite as powerful. Usual features of a labeller and you can store comments with each label's data.

PLUSES · MINUSES

- ▲ Menus simple – easy to get the program going
- ▲ Fast data entry
- ▲ Can store comments with each entry
- ▼ No import or export of data
- ▼ Data needs an entire disc to itself

LOCOKEY

£14.95 • Locomotive Softwore • 0306 740606

This successor to LocoChar is a keyboard customiser which means that any key can be made to produce any letter. The program will reproduce any one of the sixteen LocoChar-defined characters.

PLUSES · MINUSES

- ▲ Enables customisation to any distribution of keyboard letters
- ▲ Handles any combinations of accent and character

▲ Is fun and easy to use
▼ Will only be of limited use

ANSIBLEINDEX PLUS

£34.95 • Ansible Information • 0672 62576

The upgraded version of the LocoScript document indexer. Type in your LocoScript document as normal highlighting the words to be indexed with a LocoScript (+RV) code. The program will then compile an alphabetical list of entries complete with the page number on which they appear. A friendly, useful little package.

PLUSES · MINUSES
▲ Don't need to convert files into ASCII files
▲ Word counter also included
▲ Runs with both LocoScript 1 and 2
▲ One index can be created for a series of documents
▲ Indexes can be edited on screen
▲ Index entries can be inverted; instead of 'mutton pie,' for example, 'pie, mutton.'

ACCOUNTS

VITAL PROCESSOR SERIES

£29.95 – 39.95 each • Vital Software • 0732 810330

EASY TO USE

Series of three programs designed to help you look after your money and your assets. The Savings Processor is ideal for someone with a portfolio of stocks and shares; it tells you your 'net worth' like a balance sheet. The Insurance Processor helps you make an inventory of all your possessions and put a value on them, while the Income Processor helps you keep tabs on your incomings and outgoings.

PLUSES · MINUSES
▲ Income Processor allows you to budget efficiently
▲ Insurance Processor can complete inventories room by room
▲ Savings Processor is a fast and efficient way of keeping track of share values
▼ You have to be keen to do all the research
▼ It can be time-consuming
▼ With the Income Processor, it's difficult getting all the information you need from the manual
▼ It's not always clear how some of the operations work

CHECK ACCOUNT II

£14.95 • Molesoft • 03722 75053

Written specifically for the home user, this program maintains four accounts per disc in familiar bank-statement form. Its analysis feature shows trends and forecasts how much you can afford to spend. The interest-estimating feature can keep track of Building Society accounts where interest earned varies with the amount deposited.

PLUSES · MINUSES
▲ Designed solely for home accounts
▲ Easy to learn from demo file
▼ Relatively slow screen update
▼ You have to be organised to keep it up to date

DIGITA BUSINESS CONTROLLER

£69.95 • Digita International 0395 270273

EASY TO USE

Not a full accounting system, but a very easy-to-use package with an excellent manual. Nominal ledger already set up and you can be up and running in minutes. No aged creditor/debtor lists can be produced, and problems with VAT handling– not really for VAT businesses. For other small business it's very good value.

PLUSES · MINUSES
▲ Delight to use with a very good manual
▲ You can get the system working in minutes
▲ Financial ratios can be included in reports
▼ No facility for producing aged debtors/creditors list

BOOK-KEEPING AND ACCOUNTS

£69 (with invoicing, £80.50; with invoicing and stocks, £92) • Manx Tapes • 0624 813071

Recently updated suite of programs advocating a very traditional style of double-entry book-keeping. Useful demonstration disc also supplied with more than 200 example accounts.

PLUSES · MINUSES
▲ Solid, traditional approach to double-entry book-keeping
▼ Program doesn't make full use of the PCW
▼ Screen prompts not always that helpful
▼ Written in BASIC, so prone to sluggishness

COMPACT ACCOUNTS

£199.00 • Compact Software Ltd • 0628 777456

Another very large integrated package supplied on several discs and consisting of sales, purchase and nominal ledger together with invoicing. The package is available on much larger micros, and since the format in which data is produced is the same as on PCWs, the system is particularly suitable for users planning to upgrade their hardware at a later date.

PLUSES · MINUSES
▲ Audit trails are an auditor's dream
▲ Data can be used in WordStar, Multiplan or SuperCalc 2
▲ Superb prepayment facility
▲ Can run a number of companies separately
▲ Easily transported to bigger computers
▼ Lots of disc swapping necessary
▼ Can be slow to use – it runs in Mallard Basic
▼ Quirks in cash allocation routine and account code system

M.A.P. INTEGRATED ACCOUNTS

£249+VAT • MAP Systems 061 624 5662/3

POWERFUL

This is a very powerful package moved onto the PCW at a fraction of its cost on larger micros. The size makes it a little cumbersome to use, but apart from that there are very few significant problems. The integrated suite includes the same five modules as Camsoft, but they are supplied on four sides of disc, making it effectively impossible for the software to be run as an integrated system on an unexpanded 8256.

PLUSES · MINUSES
▲ A very comprehensive and professional package
▲ Very good audit trails
▲ Sales/purchase ledgers can run over different periods
▲ Facility for handling prepayments and accruals
▲ Able to print full management accounts
▼ The size of the programs means lots of disc swapping
▼ All normal responses need to be in upper case

SIMPLE ACCOUNTS II

£99.95 • Cornix • 0234 219969

The perfect accounts package for the small business by virtue of its simplicity of operation, and the limitation of its features to the essentials. Features include a useful cross-reference facility to collate expenses on individual contracts. Very comprehensive VAT section.

PLUSES · MINUSES
▲ Simple, easy-to-use program
▲ Can correct errors
▲ Keeps track of debtors and creditors
▲ Well-written manual
▲ Useful search facility

CAMSOFT PSIL

£180.14+VAT • Cambrian Software 0766 831878

Consists of five integrated packages: Sales, purchase and nominal ledgers, invoicing and stock control. In terms of sophistication it falls somewhere between the Sagesoft package and the larger systems from MAP and Compact. But it's easier to run than the larger packages since all the softwarecan be squeezed into the M drive. Good package for a small company.

PLUSES · MINUSES
▲ Already set up for 8256 or 8512
▲ No need for pre printed stationery
▲ Excellent sort and search facilities
▲ Invoices shown on screen as you create them
▼ Constant need to input full five-digit account codes
▼ No final accounts reports available on nominal ledger
▼ No facility to run the ledgers in different accounting periods

IN BUSINESS

£149.90 • Cavalier Software • 01-639 6683

A comprehensive integrated package. Comprises 'Infact' accounts and 'Instock' stock control, available separately for £59.95 each. Well designed, easy to run and powerful enough for most businesses

PLUSES · MINUSES
▲ Other packages (eg: 'Teleadd' address book) can be added
▲ Comprehensive range of features when used as a package
▲ Sophisticated pricing and order features in Instock section
▲ Flexible accounts, traps most mistakes, useful summaries
▲ Interesting forward planning facility in stock control
▼ Manual gives you a confusing number of options

SMALL BUSINESS ACCOUNTS

£69.95 • NewStar • 0245 265017

Using the split-screen method, the prompt-driven program leads you through the hazards of double-entry book-keeping as painlessly as possible. Again, very useful demonstration files supplied with the program. It also handles VAT easily.

PLUSES · MINUSES
▲ Excellent system of screen prompts
▲ Good demonstration files
▲ One of the easiest double-entry systems for the novice
▼ Manual is really for the PC

SAGE POPULAR ACCOUNTS

£87 • Sagesoft • 091 2131555

An integrated accounts package consisting of purchase, sales and nominal ledgers. For another £50 you can buy Accounts Plus which also has invoicing and stock control. Aimed at small companies with the emphasis on ease of setting up. But a number of limitations, eg. the package cannot cope too easily with rapidly increasing numbers of customers and suppliers.

PLUSES · MINUSES
▲ Clean, tidy and logical screen layouts and menus
▲ Easy to set up and use with excellent documentation
▲ Good audit trails and VAT reports
▲ Can produce formatted trial balances
▼ Restrictive account numbering system
▼ Only single Nominal ledger and VAT analysis per item
▼ Does not cater for settlement discounts
▼ Won't print remittance advice slips
▼ Cramped on 9512 printer – need 17 pitch daisywheel

M.A.P PAYROLL

£199+VAT • MAP Systems • 061 624 5662

PLUSES · MINUSES
▲ Can amend and re-run at any stage (even after printing)
▲ Cash analysis is broken down into departments
▲ System prevents re-use or amendment of leavers
▲ Can hold up to 40 standard hourly and weekly wage rates
▼ No SSP calculation facility (but can record all amounts paid)
▼ Programs necessitate a lot of disc swapping
▼ No printed record of automatic tax code changes

SAGESOFT POPULAR PAYROLL

£61 • Sagesoft • 091 2131555

PLUSES · MINUSES
▲ Any or all employees payroll can be rerun at any stage
▲ Full pay history available for all employees and leavers
▲ Calculates average pay for holidays etc
▲ Very easy to install
▼ Limited number of additions/deductions
▼ Doesn't print a list of cheques
▼ No analysis of additions/deductions

COMPACT PAYROLL

£139.00 • Compact Software Ltd 0628 777456

EASY TO USE

PLUSES · MINUSES
▲ Supplied with test data
▲ Facility to change employees tax codes following budget
▲ Can run payroll for several companies
▲ Program available for PC compatibles – data transportable
▼ Must be run from the master discs
▼ Needs input form and check calculation for each employee
▼ Once payslips are printed nothing can be changed
▼ Most expensive payroll program

CAMSOFT PAYROLL

£60+VAT • Cambrian Software • 0766 831878

PLUSES · MINUSES
▲ Full payslip displayed on screen, any item can be amended
▲ Facility for freehand narrative on any payslip
▲ Uses M drive for programs to speed operation
▲ Built in on-screen help facility
▲ Search-sort routine for output to screen, printer or disc
▲ Uses alphanumeric employee codes
▼ Screen menus a bit untidy and sometimes difficult to follow
▼ No listing of cheques

CHECK ACCOUNT TWO

£14.95 • Molesoft • 0372 275053

Written specifically to keep track of personal household accounts. Can store the details of up to four different accounts per disc, records all withdrawals and deposits and will allow an

budget accounts

everything you need for your home accounts

- You can maintain as many accounts as you wish.
- Up to twenty categories for income or expenditure per account, each with a ten letter column heading.
- Up to 12225 entries per account on the 8512/9512 and 3075 on the 8256
- Up to twenty letters of comment for every entry.
- Single category statements and full statements in two screen formats for any group of entries. Printed statements in a variety of styles.
- Screen analysis, printed analysis and bar graphs.
- Easy alteration of entries.
- The program is properly documented and presented and includes a demonstration account. It is very easy to use, with highlighted selections and cursor driven menus at every stage.

BUDGET ACCOUNTS which is available for all PCWs costs £14.95 inclusive (PLEASE STATE MODEL) from

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PLUSES · MINUSES
- ▲ No double-entry book-keeping or VAT returns to wrestle with
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EASI-ACCOUNTS SYSTEM

£23.95 • Arctan Computer Ventures
1 Foxwell Square, Southfields,
Northampton NN3 5AT

Another PCW accounts package this time for the small business man or the very organised home user. Works on the traditional system of ledgers with up to 500 entries (for individual transactions) allowed per ledger.

PLUSES · MINUSES
- ▲ Comprehensive List and Search facilities
- ▲ Manual assumes you know nothing about accounting and is, on the whole, well-written
- ▼ Not a particularly easy package to use
- ▼ You would have to be exceptionally well-organised to use it

MONEY MANAGER PCW

£49.95 • Connect Software Ltd • 081 743 9792

This accounting package has been designed for individuals, small businesses and clubs – anyone who might find a larger accounting package daunting. The program concentrates on income and expenditure, each file covering a 12-month period with up to 500 entries per month.

PLUSES · MINUSES
- ▲ Up to 20 different kinds of accounts are catered for
- ▲ Up to 50 transaction codes help categorise income and expenditure
- ▲ Needs little computer or accounting expertise
- ▲ Information can be displayed in the form of a bar or pie chart
- ▼ Too limited for bigger businesses
- ▼ Over-featured for domestic use

UTILITIES

XFORMAT2

£9.95 • Moonstone • 041 941 3120

A handy utility to provide more space on a disc. Space is created during disc formatting; the program is used in conjunction with CP/M, and gives extra room on both A & B drive discs.

PLUSES · MINUSES
- ▲ 19k extra for A drive discs
- ▲ 78k extra for B drive discs
- ▲ 32 extra A drive entries
- ▲ Very cheap for the benefits provided
- ▼ Can't copy and format at the same time
- ▼ 4k minimum blocks in B drive

FOREWORD

£44.95 • Software Imperative • 0225 425315

A text/ideas pre-processor, essential for anyone in the business of producing lengthy, structured pieces of work. You can build your document, moving &and inserting blocks with just one keypress (no block definition required). Very fast wordcounts and Find and Replace searches of either 'hidden' or 'shown' text units. Drop down menus make usage very easy.

PLUSES · MINUSES
- ▲ Quick and efficient and easy to use
- ▲ Versatile Save options
- ▲ Printout facility
- ▲ Works with 'foreground' option

PCW DRAW

£39.95 • HTB Computing • 0794 516279

Draughting package written specifically for the PCW machines. Program is teeming with features – built-in shapes and free-hand drawing facility – which, used with practice and imagination, could provide professional-looking output.

PLUSES · MINUSES
- ▲ Very comprehensive text entry and printout format options
- ▲ ZOOM facility allows you to edit small sections of a draught pixel by pixel
- ▲ Many useful functions: different line thicknesses, hatching ..
- ▲ Supports Kempston and AMX mice
- ▼ PCW Draw doesn't consider the PCW's screen aspect ratio; on-screen drawings look twice as high as wide

PCW TOOLKIT

£24.95 • Moonstone Computing • 041 941 3120

A user-friendly data recovery package for the PCW. Provided you can find the contents of the damaged file, roll out a new one, sector by sector, on M using PASTE.

PLUSES · MINUSES
- ▲ Perfect for the complete novice
- ▲ Clear, confidence-boosting manual
- ▲ Can recover data varying in amounts from a few bytes to a complete disc.

PRO-PERFORMER

£59.90 • Electromusic Research • 0702 335747

The only real musical add-on for the PCW. Easy to use software runs on CP/M, has a wide variety of powerful features and is icon-driven. Sophisticated recording facilities and the program will allow you to save compositions as tracks, songs or performances. Ideal for pop and classical musicians.

PLUSES · MINUSES
- ▲ Icon-based screen
- ▲ Can record lines independently or in an arrangement
- ▲ Punch-in editing facilities
- ▲ Facility for slow recording and fast playback
- ▲ Step-time recording for strict in tempo lines
- ▲ Tracks can be looped (made to repeat)
- ▼ Manual glosses over arrangements
- ▼ Can't edit notes individually
- ▼ No musical notation anywhere

JOB ESTIMATING & PRODUCT COSTING

£79.90 each • Cornix Software
0243 219969

Both programs aim to provide help to small businesses by keeping track of costs. You break down the product you're costing or the job you're doing into a series of costing lines – recording quantity and price per component. Program analyses profit margins and can produce customer printouts.

PLUSES · MINUSES
- ▲ Excellently-written manuals
- ▲ Simple and robust to use
- ▲ Changes in material costings instantly reflected in all quotes
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- ▼ Only suitable for small to medium-sized businesses
- ▼ Can't add new components to a description

TEMPDISC B.2

£19.95 • Thurston Techniques
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Disc of ready-made templates to be used inside LocoScript.2. All you have to do is find the particular template to suit your requirements and then fill in the details. Vast selection of borders is excellent for personalising labels and envelopes.

PLUSES · MINUSES
- ▲ Has included files to complement LocoMail's invoicing facilities
- ▲ Very easy to use
- ▲ Vast range of templates available
- ▼ Not so good if you don't like lots of visual trimmings

BRAINSTORM

£29.99 • Brainstorm Software Ltd
0895 677845

A new improved version, reconfigured for easier use on the PCW. Works as an 'ideas processor'; you throw your ideas in any order and then use the program to rearrange them and impose a structure.

PLUSES · MINUSES
- ▲ Quick and efficient and easy to use
- ▲ Encourages structured thinking
- ▲ Versatile; many different editing facilities
- ▲ Results can be fed into a word processor for polishing up
- ▼ Namesakes must be exact matches
- ▼ Manual is on disc, so you can't consult while using BrainStorm unless you print it out

FORMS BOX COMPENDIUM

£19.95 • Disc Design • 0337 7444

Fully compatible with LocoScript 1 and 2, this disc provides ***70 different kinds of forms for home and office use. You can either fill them in on the screen, save and print them out or print them out and fill them in later. A solid, no frills product.***

PLUSES · MINUSES
- ▲ Very easy to use
- ▼ Will only print out on A4 size paper

POOLS MASTER

£19.95 • Intraset Ltd • 02572 76800

This program helps you select the numbers to cross on your pools coupon taking its recommendations on the recent form of each team or simply on the basis of sequence prediction (going on the numbers which have provided draws in the past).

PLUSES · MINUSES
- ▲ Very easy to use
- ▲ More accurate than the newspaper pundits
- ▼ Entering form results from week to week is tedious

LOCOFONT I

£19.95 • Locomotive Software (0306 740606)
8000s only

A selection of new fonts to help you break out of the standard LocoScript typeface. There's a very good selection of styles to choose from: 'handwritten' styles look very good as do the Copperplate and Script styles. The Roman and Standard fonts are more practical. The new characters are reproduced very well indeed. A further six fonts are available, including Old English and flowing script, on LocoFont II for £14.95.

PLUSES · MINUSES
- ▲ Eight new fonts, one coming for free
- ▲ Each style supports all accents, characters, etc.
- ▲ Relatively cheap and easy to use
- ▲ Can break out of that one-pattern printout.
- ▼ Can't mix styles in one document
- ▼ Limitations of a 16 dot pattern means that the quality cannot be brilliant

PS HEADINGS

£11.95 • Orb Systems • 081 690 8534

An updated version of the original product, with a major improvement in speed. A must for all Protext users who need to incorporate high quality large print for letter headings and so on. Facility to alter stylistic details such as shading, underlining and triple-strike printing.

PLUSES · MINUSES
- ▲ Easy to use
- ▲ Range of styles
- ▲ Good manual
- ▼ Only one font available (although in two sizes)

TAS-SIGN

£29.95 • Tasman Software • 0532 438301

Takes time to print out but you can print signs of up to five lines of text up to seven inches high with up to 32 characters in each. Four fonts, eight hatching patterns, and you can print lengthways on continuous paper for long signs.

PLUSES · MINUSES
- ▲ Wide range of fonts and shadings
- ▲ Long signs will print out in 'landscape' (sideways) format
- ▼ Long signs take time
- ▼ Some symbols (yen signs etc) won't print out on PCW

GILLIGAN'S GUIDE

£29.95 – 49.95 • NG Gilligan • 0629 56347

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PLUSES · MINUSES
- ▲ A thorough, versatile and easy to use package
- ▲ System can be interrogated in a number of interesting ways
- ▲ Breaks sites down into areas of specific interest
- ▲ You can commission you own made-to-measure guides

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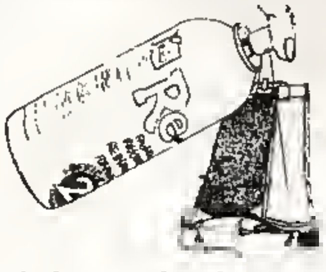

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AGENDA POCKET COMPUTER includes extra 32K RAM card, battery charger, RS232C cable, for PCW 8256/8512 manuals, case, brand new, £155. Brainstorm Organiser software, for PCW 8256/8512 £15.
Tel: Scarborough [illegible]

AMSTRAD PCW9512
inc. sheet feeder unused gift £450
(0825) 872502 (East Sussex)

WANTED: SOFTWARE FOR PCW on project programming, critical path analysis
or pertmaster, any offers?
Hilary, Mount Way, Lancing, Sussex, BN15 0QO.
(0903) 755765.

SAGE POPULAR ACCOUNTS £40 'Best general buy' 8000 Plus. Pocket Wordstar Deluxe £35.
Darrell Jackson, 9a Marlborough Terrace, Bovey Tracey, Newton Abbot, TQ13 9AU. (0626) 834918

PCW8512, Computer desk, acoustic hood, Locoscript II, screen filter, manuals, 2 disc holders, Masterscan, AMX mouse, Stop Press, Prospell, Batman, Scrabble, Jumbo, covers, £840 new, 28 8000 Plus, hardly used, £375 **Portsmouth 816600.**

PCW 9512 as new including Locofile, Mini Office Professional, dust covers, three extra printwheels £400. **Phone Paul on (0473) 828095 (Ipswich area) after 6pm for further details.**

RECBASE - a fully featured yet simple to use database for record collectors £12.50. Send cheque (state machine type) or SAE for factsheet to **C.J. Roberts, 18 Bulmershe Road, Reading, Berkshire.**

ROUTE FINDER FOR PCW 8000's Allows A-road and motorway routes, multiple stops and map generation. Send **SAE to: B. Beach, 16 St. Helier Place, Lordshill, Southampton, SO1 9QN.**

WANTED CF2 DISKS
I'll pay £1 each (new), 65p each (opened) for all your surplus branded disks. Send 'Freepost' payment by return to:
Humphrey Newcombe, Freepost, Dronfield, S18 6LZ.
Tel: (0246) 416306

PCW9512 double drive £375, manuals, CP/M+GSX £8, Locomail + example disk £10, Locofile £8, Mallard-Basic £5, Locoscript 2, 24 pin pntr/drv £12.50, SCA+ RS232C interface £38, cased 3"DD/DS £1.20, uncased £1 (about 100) Tempdisc 9 £8.50, Fonemate £6, 7 PD CP/M disks @ £2.50 Hughes & Sinclair's Locoscript 2 £5.50 each.
Phone Tony (0245) 257823.

8512 FOR SALE
Good condition boxed. All original disks and manuals, includes Locoscript 2 with Locospell, plus 8000 Plus PCW luggage, 15 months old, price £280.
Telephone (0460) 76681.

FREE HELP FOR NEW PCW USERS
Is computing a foreign language!! Can't understand the manual!
Phone Seaton (0297) 20456 between 7/10pm
"I'll do my best to help!" (Chris Bryant)

SMALL ADS RATES

Private ads cost £7.50 for up to 30 words. (This rate only applies to readers wishing to sell their own hardware or original software or to pass on a message to other 8000 Plus readers)

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PLUSES · MINUSES

- ▲ Excellent manual with helpful practice exercises
- ▲ Comprehensive list of ready-made latitudes and longitudes supplied
- ▲ Cycle option transports you forward a month at a time so that you can chart the stars' progress
- ▼ Screen displays could be more exciting
- ▼ Moon and planets aren't included

POCKET DATADATE

£24.95 • A4 Ideas • 0249 815082

An invaluable utility for those who crave date-related trivia. Fully operational under LocoScript 2, Pocket Datadate even prints filofax-sized text.

PLUSES · MINUSES

- ▲ Program recently updated
- ▲ Very informative
- ▲ Ideal for quizmasters
- ▼ Only works with LocoScript 2
- ▼ Documentation currently on disc

PCW SUPERDOS

£29.95 • Encyclasoft • 0270 811890

Fills the gap between the friendliness of LocoScript and sparsity of CP/M. Has the ability to copy multiple files at once, and can back up an entire directory.

PLUSES · MINUSES

- ▲ Printable 'notepad' facility
- ▲ Makes CP/M less daunting to use
- ▼ Need to leave SuperDOS for some functions

FACTOTUM

£14.95 • Tudor Systems • 0622 861775

The combination of LocoScript 2, LocoFile and LocoMail will give you access to this extremely useful catalogue of information. As well as a diary, incorporating special date reminders, there is an address and telephone list, and a tax planner.

PLUSES · MINUSES

- ▲ Works from LocoScript
- ▲ Very efficient letters section
- ▲ Easy to use
- ▼ Poor presentation
- ▼ Won't work with an unexpanded 8256
- ▼ Assumes knowledge of LocoScript

SUPERZAP

Public Domain • Various suppliers

A disc editor with a difference – one key commands taken from adequate menus permit easy operation. Superzap allows you to examine both the structure and contents of the M Drive. Lack of print function is an irritating pitfall -this command is even disabled in CP/M

PLUSES · MINUSES

- ▲ Very easy to use
- ▲ Simple one key commands
- ▲ Menu driven
- ▲ Fast 'find' function
- ▼ No copier
- ▼ Numbers can only be entered in hex

DATA DIARY

£16.95 • A4 Ideas • 0249 815082

More PCW-generated diary inserts for use at home or in the office. The program works from within LocoScript so you can make use of all LocoScript 2's text and style enhancements. Inserts feature year to a page calendars, month at a glance planners and page a day formats.

PLUSES · MINUSES

- ▲ Buy it at any time of the year and you will be supplied with next 12 months' supply
- ▲ 2 versions available – for A4-size and Filofax-size printout
- ▲ A solid, no-frills product that's easy to use

INVESTOR

£29.95 • B & BB Software • 0240 242946

Program has been designed to assist the share-owner in the management of a portfolio and to help in the choice of shares to buy and sell. It allows up to 300 stocks, shares or unit trusts to be kept in its library. Stocks are listed in order of their performance and you can call up graphs of price movement for individual stocks. Good, easy to follow manual.

PLUSES · MINUSES

- ▲ Records share-holdings, dividends and cash accounts
- ▲ Dividend printout for tax purposes
- ▲ Four methods of share price analysis
- ▼ No ability to calculate taxable gains
- ▼ Graphs are small and lack expansion facility
- ▼ 9512 owners won't be able to print out the graphics

PERSONAL TAX PLANNER

£24.95 • Digita International • 0395 270273

Simple program which asks you all the questions relevant to your year's tax affairs, and prepares your tax return claim (or bill!) Can, for example, find out whether married couples would be better assessed separately or not. Personal Tax Planner is updated every year – look out for the most recent version following March''s budget .

PLUSES · MINUSES

- ▲ Simple to use
- ▲ Needs a minimum knowledge of the tax law
- ▲ Forces you to keep your tax details in one place
- ▼ Limited application – might only use it once a year
- ▼ Program updates (for a new allowance level) cost £10

KNIFE PLUS

£19.95 • Hisoft • 0525 718181

An essential tool for retrieving data from corrupted discs. Knife Plus will copy all uncorrupted sectors on to a fresh disc which you can then patch up without risking the original.

PLUSES · MINUSES

- ▲ Copies all uncorrupted data from damaged discs
- ▲ If boot sector damaged, will copy good boot sector onto disc
- ▼ Requires some knowledge of basic disc structure
- ▼ Manual not written for beginners

WISE ONE

£34.95 • Swallowsoft Publications
0420 63793

An expert system – you input rules and information and Wise One becomes an 'intelligent' program which can, for example, do simple diagnoses according to symptoms you type in.

PLUSES · MINUSES

- ▲ Power to be genuinely useful
- ▲ Elementary arithmetic
- ▲ Help screens can be set up for the user
- ▼ Obscure way of writing rules – need programming instinct
- ▼ Manual dry and academic

FLIPPER 2 PLUS

£29.95 • Software Imperative
0225 425315
9512/8512 only.

Can do everything the original Flipper did and more. You can now flip Mini Office and LocoFile and will have no problems with whatever version of LocoScript you're using.

PLUSES · MINUSES

- ▲ Easier to install than its predecessor
- ▲ Can flip between environments in as little as 2 seconds
- ▲ Professionally-presented documentation
- ▲ Works with most CP/M programs, LocoScript and BASIC
- ▼ Still won't work with many self-loading games
- ▼ Be careful of state of printer and disc drives when flipping.

SUPER TYPE II

£14.95 • Digita International • 0395 270273

A program for users of LocoScript and CP/M programs, which modifies the fonts used by the PCW printer. SuperType has 4 'business' and 'novelty' fonts. It works by directly altering the relevant files for LocoScript or CP/M, so you only need run it once – after that, the new chosen font is available.

PLUSES · MINUSES

- ▲ Once installed, you can totally forget it's there
- ▲ Genuinely useful range of fonts available
- ▲ All LocoScript's print size and style options still work
- ▼ You can't mix different fonts in the same document

DAATAFAX

Basic version £39.95 (with Microfile £49.95/with mouse £79.95) • Kempston Data
0234 855666

Used with personal ring-binder, it helps you keep track of names, addresses and appointments. Prints out data in a form that will fit the average organiser.

PLUSES · MINUSES

- ▲ Flexible and easy to use; saves buying inserts
- ▼ Not very sophisticated: keeping it up to date is tedious

DHCP 12-TRACK SEQUENCER

£45 • DHCP• 0440 61207

Add-on 'recording studio' for the PCW, consisting of MIDI interface and software. 12-track polyphonic capacity

PLUSES · MINUSES

- ▲ Fun to use
- ▲ Can cope with quite advanced instruments
- ▲ Cheaper than its competitor
- ▲ Tracks can be bounced to enable several tracks to all be put into one
- ▲ Looping can start/end at any bar
- ▼ Manual is skimpy
- ▼ No editing possible without re-recording whole tracks

DTP

THE COMPOSER'S PEN

£75.00 (£30.00 pocket version) • Composit Software • 0952 595436

A sophisticated program which allows you to write musical manuscripts, complete with time signatures, key signatures and any other notation you require. Changes to the manuscript can easily be accomplished, and it can even transpose music into different keys. A vital tool for the composer of every kind of music.

PLUSES · MINUSES

- ▲ Good print quality
- ▲ Allows multi-part compositions
- ▲ Easy to use
- ▲ Complete range of musical notation
- ▲ Transposes from key to key
- ▼ Slow in use

NEWSDESK INTERNATIONAL

£25 (with lightpen £50) • The Electric Studio
0462 420222

Versatile package with a very wide range of graphics facilities and high quality headline text. Page make-up is flexible, though the program can be a bit cumbersome, mainly in text handling. Same graphics facilities as Electric Studio's 'Art' package which it supersedes.

PLUSES · MINUSES

- ▲ Good control over the elements on the page
- ▲ Powerful graphics facilities
- ▲ Good quality print in headlines and large fonts
- ▲ Can use font editor to create your own high quality fonts
- ▼ Text-handling slow and cumbersome; editing is difficult

STOP PRESS

£49.95 • Database • 051 3572961

An excellent DTP package, very strong on graphics, very well designed, and once you get used to it, very easy to use. Sophisticated text handling features such as autoflow, but can't edit text – that all has to be done in your word processor before flowing the text in. Wide range of fonts.

PLUSES · MINUSES

- ▲ Excellent graphics facilities, good as any graphics program
- ▲ Wide range of text styles with text autoflow
- ▲ Menu and key commands system suits beginner and expert
- ▼ No text editing ability

LATE EXTRA

£19.50 • Exemplar Designs •'PO Box 683, Bath, BA1 1XU

A Stop Press add-on consisting of a collection of 11 fonts that cover the range of type styles and sizes needed to create a balanced page. Also supplied on disc is a 13-page book , describing how to create your own professionally produced publication. Allows you to create a good-looking page with clear text.

PLUSES · MINUSES

- ▲ Good range of 11 complementary fonts
- ▲ Can adapt template for own use
- ▼ Time-consuming
- ▼ Text needs reducing for best results

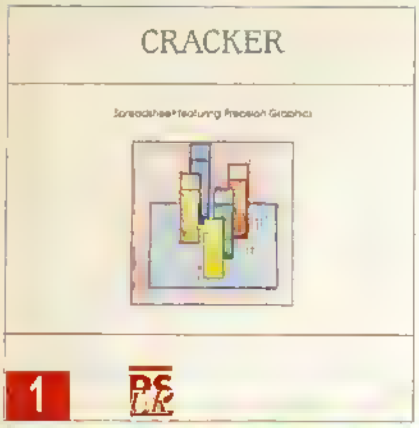
MICRODESIGN II

£59.95 • Creative Technology • 0889 567160

The ultimate DTP package for sheer printout quality; Creative Technology have treated words and graphics as being equally important, hence the program's 'integrated page processor' label. Runs on all three machines with high quality results.

PLUSES · MINUSES

- ▲ Has full 24-pin printer compatibility
- ▲ Easy and fun to use
- ▲ Excellent text-editing facilities


CRACKER
Spreadsheet featuring Precision Graphics
PS UK

1

CRACKER 2

Charts, graphs, everything you would expect from the PCW's most powerful spreadsheet. With Paperback Software behind it and our own Buyer's Guide rating you can be sure this will fulfil your spreadsheet needs.
R.R.P. £49.95
OUR PRICE £29.95.
Order no. 8081

SAVE £20

The Complete Home Entertainment Centre
Super Value Game Compilation
CDS
PCW 8256/8512/9512

2

THE COMPLETE HOME ENTERTAINMENT CENTRE

A CDS compilation that brings classic pub games to your own living room. Backgammon, Darts Dominoes, Video Card Arcade, and Wordsearch all at your fingertips for that rainy day.
R.R.P. £19.95
OUR PRICE £13.95.
Order no.8611

SAVE £6

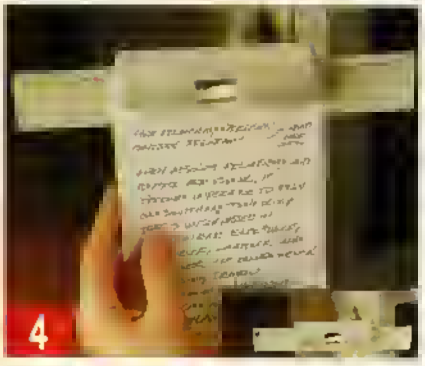
24 HOURS TO KEYBOARD MASTERY
TOUCH 'n' GO
FOR THE PCW

3

TOUCH AND GO

Touch and Go, recently reviewed in issue 47, is a no-frills, no-nonsense package that should speed up the most ham-fisted of typists.
R.R.P. £24.95
OUR PRICE £14.95.

SAVE £10



4

COPY HOLDER

A handy accessory, easy to fit, easy to use and easy to buy. Not only does it make typing easier but also keeps the desk tidy.
Just fill in the form.
OUR PRICE £9.99.
Order no.8617

HiSoft
Pascal80
CP/M Compiler & Editor
HiSoft

5

PASCAL

Pascal from HiSoft, up to their usual high standard. Pascal is faster than Basic and is just what you need to speed up your PCW. For all PCW programmers. This is a special product at an *8000 Plus special price*.
R.R.P. £39.95
OUR PRICE £26.95.
Order no.8614

YOUR FRIENDLY AMSTRAD
WORD PROCESSING ON THE AMSTRAD PCW 8256 & PCW 8512

6

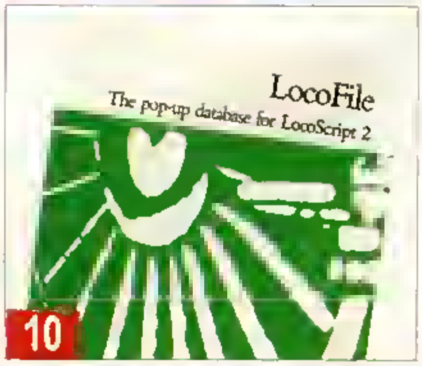
THE 8000 PLUS COLLECTION
The Ultimate Tips Book for the Amstrad PCW
ROB ANSLEY

7

8000 PLUS AMSTRAD

8

9


LocoFile
The pop-up database for LocoScript 2

10

YOUR FRIENDLY AMSTRAD

A brilliant word-processing book that makes the 8256/8512 even more accessible. Help pages and a 12 session Locoscript course make this book an essential source of reference for your word-processing.
Get a free pack of twenty disc labels with this order.
OUR PRICE £9.95
Order no. 8612V

THE 8000 PLUS COLLECTION

Ex-editor Rob Ainsley has put together the best hints and tips from 4 years of your favourite magazine. Essential reading for all our readers. With the disc it is even more value for money.
BOOK ONLY:£11.40
Order no.8602
WITH DISC £14.40
Order no.8603

8000 PLUS BINDER

You need never lose another tip again with these gold-embossed binders. At last, you can tidy up that pile of 8000 Plus's you keep meaning to sort.
At this giveaway price you no longer have an excuse!
OUR PRICE £4.95 Order no.8004
TWO FOR £9.00 Order no. 8076

8000 PLUS T-SHIRT

And from the latest fashion shows we are pleased to present the definitive accessory for the 8000 Plus reader who needs to do a bit of gardening or late night programming- The 8000 Plus T-shirt in glorious American Blue.
MED T-SHIRT £4.95 Order no.8071
LARGE £4.95 Order no. 8072

LOCOFILE 8256/8512

The industry standard database from the makers of the industry standard word-processor. Combines brilliantly with LocoScript 2 for the8256/8512, in an easy-to-use environment. Pops up whenever you need it.
We are giving away a free wallchart and a T-shirt with this package.
OUR PRICE £29.95
Order no.8044B

mini OFFICE
PROFESSIONAL
WORD PROCESSOR
SPREADSHEET
DATABASE
GRAPHICS
COMMUNICATIONS

11

MINI OFFICE PROFESSIONAL

This has to be the Integrated package for all your business needs. Comes with "The all in one Business Computing Book", this package contains word-processor, database, spreadsheet, graphics and comms.
We are giving away a free pack of highlighter pens with this offer.
OUR PRICE £26.95
Order no.8610

SAVE £13

8000 PLUS
soft OPTIONS
A collection of 8000 Plus software

12

THE SOFT OPTION

Compiled by our own team this is available exclusively through 8000 Plus.Comprising .CUT files (clip art) for Micro Design ii, FREDA.BAS, a MALLARD BASIC file editor and DWBAS, a BASIC extension, and a host of other goodies.
OUR PRICE £5.95
Order no.8616

Junior Playtime
10 EDUCATIONAL PROGRAMS
FOR CHILDREN AGED 4-8 YEARS OLD
DGC SOFTWARE
SCHOOLS OUT
5 GAMES

13

SCHOOLS OUT/JUNIOR PLAYTIME

Two games from DGC Software . Schools Out comprises Hangman, Wordsearch, Junior Crossgrid, Four in a Row and Reversi for the 7-14 year old. Junior Playtime has 10 fungames for the 4-8 year old.
RRP £14.95 each

Schools Out £10.99	Order No.8619
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COMPUTER SHOPPER

SHOW 1990

6-9 DECEMBER 1990 *WEMBLEY CONFERENCE CENTRE*

The Ticket Office Is Now Open! Save Time Save Money!

Doubling Up On Success

Last year saw almost 30,000 people converge on the first Computer Shopper Show. This year, the event - already the world's largest pre-Christmas computer shopping spree - will be even bigger.

The move to Wembley means nearly twice as much floor space, twice as many exhibitors, twice as many bargains, twice as many entrances and an extra day - all designed to cater for record crowds.

After all the Computer Shopper Show exists entirely to help the buying public get what they want at the price they want to pay. Ask anyone who went to last year's Show about the money they saved. Many visitors in our exit poll reported getting more than twice what they expected for their money (or paying half what they'd budgeted). That's what we call value!

Then there's advice - lots of it - on what to buy. Whether you're already a committed computer buff or a complete novice.

Whether you're in to PCs (including Amstrads and any IBM clone), Amiga, Atari ST, Acorn (Archimedes and BBC), Commodore and Sinclairs - or any popular machine - you'll find one-stop shopping at the Computer Shopper Show.

Start saving money now! Buy an advance ticket and you're already a pound or more in pocket. Or save even more with a family ticket - only £12 for two adults and two children.

Cut down on queuing time. Be first through the door to save even more money. Pre-order your entry tickets for FAST LANE PRIORITY.

Call the Hotline 051 357 1736 have your credit card details

☐ ___ Adult tickets at £4 (save £1)
☐ ___ Under 16's tickets at £2.50 (save £1)
☐ ___ Family tickets – admits up to 2 adults and 2 children – £12.00 (save £5)

Please indicate which day you expect to attend the show
☐Thursday ☐Friday ☐Saturday ☐Sunday

I would like to pay by –
☐ Cheque made payable to Blenheim Database Exhibitions Total £ ___________
☐ Credit card ☐ Access ☐ Visa Expiry date ________ No.☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signed ____________________

Name ____________________

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Please return your completed order form to –
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Ellesmere Port, South Wirral L65 3EA

Adults	~~£5.00~~	£4.00
Under 16's	~~£3.50~~	£2.50
Family Ticket (2 adults, 2 children)	~~£17.00~~	£12.00

The Computer Shopper Show 1990

Wembley Conference Centre
Wembley, London
Thursday December 6th -
Sunday December 9th 1990

Opening Hours:
Thursday December 6th
10.00-6.00
Friday December 7th
10.00-6.00
Saturday December 8th
09.00-6.00
Sunday December 9th
10.00-5.00

POSTSCRIPT

Feeling happy? Feeling sad? Or simply don't understand something? Why not drop us a line and share it with the rest of the PCW-owning nation.

More of your comments, criticisms and praise on the vital issues of PCWdom can be found on these pages. Under the Editor's consideration, this month, are Scrabble bugs, Protext quibbles, mobile LocoScript training and South coast beaches. Please continue to send your letters to Postscript, 8000 Plus, 30 Monmouth Street, Bath BA1 2BW.

Beat the system

I have a CPC 464 for which I have accumulated an amount of files (on tape, of course) and a number of purchased games and utilities software. I am about to purchase a PCW 8256, and I wonder if there is any way to transfer any or all of the taped files/software programs to disc, before I "dispose" of the 464?

This may be a silly question but despite owning the 464 for several years I am still a user-without-understanding; mainly due to lack of time I use purchased software or carefully (!) follow instructions.

I would be grateful for any advice you could give me – and since, I imagine, my query may be rather too strange to publish I am enclosing a SAE in hope that you may be able to give me a direct reply, even if it is only "No way!"

Miss G Smith, Bicester, Oxon

8000 Plus: *First off, nothing is ever too strange for us to publish in these pages. Now onto your question. Because the CPC and the PCW operate under different kinds of CP/M, the only files that you can guarantee can be read by both machines are ASCII text files. Certainly, no .COM files or games can usually be 'transported' between the two. It really does look like you're going to have to flog them off and start again.*

All clear ahead?

Please can you help me?

Would it be possible for you to tell me where I can get a replacement printer head attachment for MasterScan which would fit the PCW dot matrix printer.

The reason why I am asking is, that some weeks ago, due to an unfortunate occurrence, my printer head attachment suffered some damage, ie. it got cracked and broken. So, therefore, I have not been able to use my Master Scan/Pack software.

All I need is that small plastic head attachment for my PCW Dot Matrix printer.

I would be ever so grateful if you could help me.

Josephine J Rao, Hengoed, Mid Glamorgan

8000 Plus: *No problem. All you have to do is write a letter to Database Software (incidentally their phone number is 0625 859333) explaining exactly what you want and they will send you a new one. The good news is that the new printer head attachment only costs two quid.*

Witness for the defence

I have only recently bought a PCW 9512 and even more recently found your magazine. I would first of all like to congratulate you on an excellent publication which seems to me as a novice to word processing to cover all levels of experience.

However I thought I would write to put on record my congratulations to two of your advertisers for the service I have received. Ten days ago I purchased an AMX Mouse and interface from Silicon City and could not understand why it was not working.

On Thursday I telephoned them in the afternoon to explain the problem and they said they thought it was a faulty mouse and they would send a replacement immediately. I asked what about the one I had and they told me that they would enclose postage for return with the new one. At the same time I asked for a second disc drive and Ram Pack on my credit card. BOTH sets of items were delivered to me (I live in a small village in Suffolk) second post on the Friday – the day after I telephoned.

I decided to set up the second disc drive that afternoon and the instructions from Silicon City were so clear that I found it impossible to go wrong and we were up and running within one hour. The new mouse also worked.

I then had to ring Creative Technology with a query about Micro Design and they were also very clear and lucid, as well as having the patience to talk to me.

Alan Bolton, Shotley, Nr Ipswich

8000 Plus: *Thanks for your letter, Mr Bolton; that sort of thing is always good to hear.*

Running for ...

I was interested to read about the tip of applying a small square of cling-film to the screen of the PCW's monitor; this sounds like a good idea – the screens in my classroom suffer greatly from fingermarks! I wondered whether someone might be able to invent a kind of stencil that would press film between the keys of the keyboard to protect it from dirt and spills.

Once again, may I thank you for your excellent magazine which I always find interesting, useful and informative.

Gladys Baker, Stockton-on-Tees, Cleveland

8000 Plus: *Thank you. Sophie, have we sent this person's cheque off yet? You will be pleased to hear that there is, in fact, currently available on the PCW market a protective film covering for the keyboard which will do just that. Following last month's Postscript, a company called Kador (Unit 4, Pontcynon Ind. Estate, Abercynon, Mid Glamorgan, CF45 4EP) wrote in to tell us that they are still producing Seal 'n' Type, their type-through keyboard cover which is moulded to fit over each and every key. It also comes in 8000 and 9512 keyboard formats for £10.95. Phone 0443 740281 for further information.*

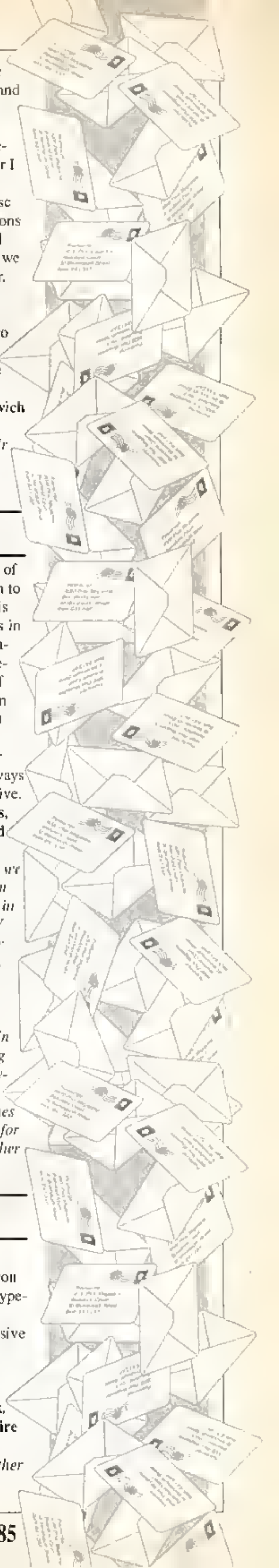
... cover

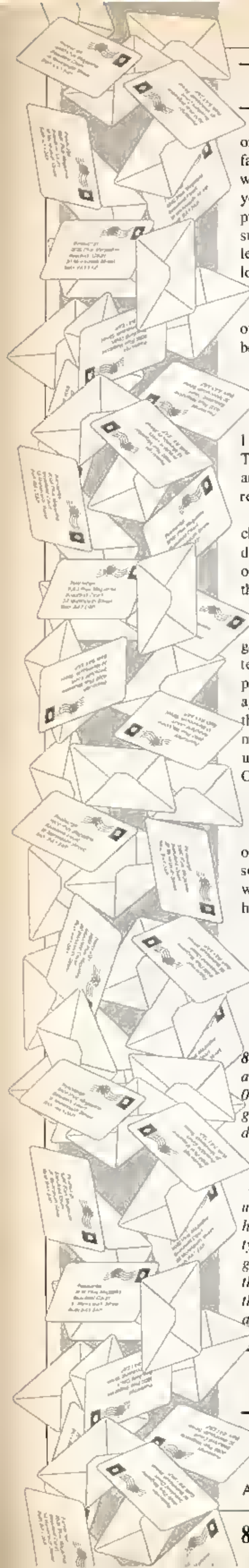
In reply to S T Payne of Great Missenden in October's Postscript you say you do not know who supplies type-through keyboard covers.

These are available for an extensive range of keyboards including the PCWs, and can be obtained from Aladdink – telephone 0890 750965.

Nick Godwin, Aladdink, Eyemouth, Berwickshire

8000 Plus: *Whoops, there goes another one.*





I quit!

So convinced by your worthy article on POCKET PROTEXT, and having a fading enthusiasm for LocoScript 1 which I have used for the past three years, I visited my nearest stockist and purchased this program eminently suited you say, for the student, writer of letters and those who wish to produce long documents, eschewing the frills. That's me.

After something like twenty hours of application I could not proceed beyond the command instruction to QUIT THE PROGRAMME – press O, for which I did, having believed that the manual was telling me that I had then CONFIGURED the disc, I was asked for a PROTEXT.COM,? Try as I might, I could not locate this answer in the manual and any guessed response was rejected.

I returned to the source of the purchase, who, with kindness, replaced my disc with another from another package on the shelf, and asked me to work on that. I have to say that I followed the same procedure as the manual directed but, frustratingly, could not get beyond the stalemate I had encountered previously – the configuration program I followed to the letter but again, on striking O to quit, I received this question PROTEXT.COM? When I moved to ask if the PCW had configured, the answer again was – Configuration not found.

From time to time I return to the task set in the manual only to obtain the same result. Thus, there can be only one problem; me. I must be failing somewhere and convinced of that, I wrote to Arnor for guidance; to date I have had no reply!

I thought you would like to know that my purchase, made on the encouraging report on p46/47 of edition no 42, turned out so disappointing for this reader.

Tom Flanagan, St Albans, Herts

8000 Plus: *You're making, dare I say it, a quite simple mistake. When you press 0 (zero) to quit the configuration program on side 2 of the Protext master disc, the program then searches for the Protext.com file (ie, the program file) which is on the other side of the disc – hence the repeated Protext.com? message you're describing. When this happens, simply turn your disc over, type in Protext – and away you should go! On the other hand, you could turn the disc over just before you press 0 so that Protext.com is automatically accessed.*

Whistle while you work

Following on from last month's Sudden death Postscript letter, an external aerial is not the only answer. A good quality portable set can reject the interference. I have a Roberts RCS80, with synthesised presets, that behaves perfectly in the same room as the PCW, whereas its predecessor goes berserk at the other end of the house. It wasn't cheap, mind, but to me it was worth every penny (of the 10,000 or thereabouts) to be able to have the PCW and Radio 3 on at the same time.

Alan Sloan, Sheffield

8000 Plus: *Cheers for that, Alan.*

Any old ion

I wonder whether Mr Weddell, like me, has an ioniser near his PCW?

For health reasons I use these negative-ion generators and at one time had one very close to me while using the Amstrad. During one of those thoughtful moments when I sat looking at the green screen, wondering what to do next, I was amazed to see a gap suddenly appear in one of the lines of text. My first thought was 'Can this be one of those viruses the experts talk about?' As I gazed in disbelief extra characters started appearing on the screen; my hands were nowhere near the keyboard! I went back to the disc management screen, wondering what to do, only to discover that I could in fact do nothing as nothing would happen no matter what-and-how-many keys I pressed. Even [SHIFT] [EXTRA]+[EXIT] wouldn't work. I had to do what Mr Weddell did; remove the discs, switch off and re-boot. It didn't do me much good as it happened all over again.

If it wasn't a virus, I guessed it had to be my ioniser. It was!

I still need my ioniser; have you experts any helpful advice please?

Harry Carter, Ryde, Isle of Wight

8000 Plus: *Well, the general consensus of opinion here in the office seems to be that you should a)move the ioniser over to the other side of the room from your PCW and b)use a different plug. If your machine still insists on locking up, you can rest assured it's not the ioniser. Something else must be amiss.*

You send me

Sometime ago an article was featured about the possibility of using the PCW to transmit Fax messages – it appeared possible only by subscribing to Telecom Gold or the like. It has always seemed to me that it should be possible to convert an ASCII file into a form which is understood by Fax machines and I understand that there now exists a modem and software that performs such a conversion. It is produced by Digital Matrix, 14 Arden Oak Road, Sheldon, Birmingham B26 3LX (021 722 3828). Does this item work with the PCW and if so is there any possibility that it will also convert graphics files?

Tony Guyton, Athens, Greece

8000 Plus: *You're perfectly right in what you say. Digital Matrix do, in fact, produce a high-speed modem and software which will transmit ASCII and graphics files to a fax machine. The bad news is, however, that the package will only work under DOS, not CP/M. Your best bet would be to think about investing in the new Amstrad fax machine which will do all that for you and which interfaces directly with your PCW. Unfortunately, at £689, it's not all that cheap. On the other hand, it is very good. Read our review of it on pages 18 and 19 of the July issue (issue 46) or phone 0279 454555 for further information.*

Performance guaranteed?

I now desire to extend the memory of my PCW. The cheap but more complex way is to buy a kit of chips take off the back and use DIY. But what about my extended warranty? A quick call to Comet and a word with their service department revealed two things; first, the warranty would be void. What if he did it? That, said their computer engineer, cannot be done! When I phoned Amstrad, they said yes, it can be done, and it does nullify the warranty even if they do it!

The expensive way would be to buy an SCA add-on; that way, everybody's happy except my wallet. Your comments would be much appreciated.

John Leonard, Chepstow

8000 Plus: *If your PCW is still under guarantee, and you wish to upgrade it, a company called Dictaphone Ltd (Parkhouse, 10 Park Street, Leamington Spa, Warwickshire CV32 4XF) will carry on all the work for you. They will also do it – if need be – within the comfort of your own home. They do three types of upgrade: drive only (for £149), memory only (£89) or both (for £199). And you get a 12-month warranty on the upgrade. There is, however, a four- to six-week waiting period. Give their hotline a call on 0926 429124.*

Show off

Can you or a reader help me? I bought a copy of Scrabble (put out by Leisure Genius/Virgin) and no matter what I do, it insists on showing me its innermost thoughts. I don't wish to know them. I get the prompt 'See Me Think?', I type in 'N' and it takes no notice at all. I have no trouble with 'View Racks' – typing in 'N' successfully hides them. I wrote to Leisure Genius months ago, and they never answered. I'd also like to be able to make a copy of it for my own use – we get occasional power cuts here, and I've already had one disc corrupted; naturally (being one of your readers) I had a backup, but although I've tried a couple of ways, I can't

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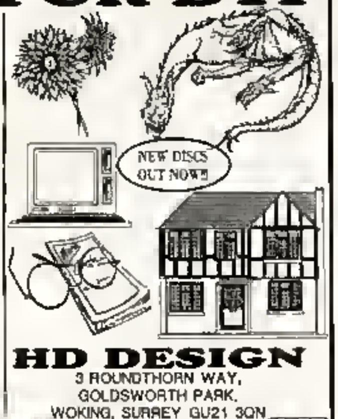
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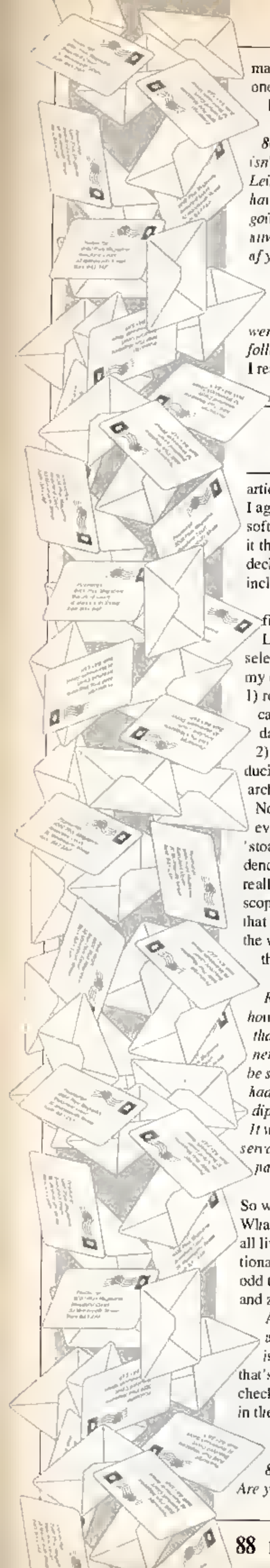

make a backup of this. Thanks to anyone who can help me out!

Elspeth Christie, Alston, Cumbria

8000 Plus: *Well, Elspeth, the news isn't good. We've just spoken to Virgin Leisure's technical department and they have informed us that, basically, you're going to have to learn to live with this unwelcome show of feeling on the part of your program. It's a bug which has always been there and they've never got round to doing a fix for it – ever since 90% of the packages were sold during the six month period following its launch. Sorry.*

Esoteric, abstruse, recondite

I read Sophie Lankenau's enthusiastic article about LocoSpell in issue 48 and I agree that it's a jolly useful piece of software. There is just one thing about it that puzzles me: who on earth decided which words to include to include in the dictionaries?

Below are two lists of words; the first contains words from the large Locospel.dct while the second is a selection of some choice words from my own Userspel.dct.

1) rocambole, abaca, shagbark, ouabain, carrageen, caracal, serranid, zygodactylous.

2) anglo, defunct, competitive, conducive, unlucky, stoat, metropolitan, archives.

Now, I'd be the first to allow that not everyone will be dropping the word 'stoat' into their business correspondence but I submit that the rest aren't really so obscure as to be beyond the scope of a general dictionary. I suggest that few people will ever have heard of the words in the first list, let alone use them:

Roger looked around the greenhouse. The abaca was doing well. Was that a rocambole growing in the corner? He couldn't be sure. He couldn't be sure about anything since Sarah had been killed by a poison dart dipped in ouabain. The doorbell rang. It was the fishmonger delivering the serranid he had ordered for the dinner party.

So who chose all those bizarre words? What kind of sad, lonely world do they all live in? Given that space for the dictionaries is limited, it does seem a little odd to have included so many botanical and zoological words.

Aside from this slight eccentricity, I am compelled to say that LocoSpell is extremely useful. Anyroad up, that's all I've got time for; I've got to check the zygodactylous birds we keep in the shed.

Tim Norris, Bristol

8000 Plus: *Thanks for your letter. Are you sure, Tim, that that first list isn't the program's suggested replacements on your own spelling mistakes? Point taken, though; point taken.*

On the right track

I am very confused about which type of disc I should use in my 9512.

Problems with standard Amsoft discs suddenly becoming inaccessible, particularly when nearly full, caused me to seek advice from suppliers.

I have been advised by every supplier that I need discs different from the 'Amsoft' ones supplied by Amstrad with the machine. I am told that these discs are no longer recommended for the 9512 but are only suitable for the 8256. Is this true?

In other respects the advice has been contradictory. Some suppliers urge me to buy 'DD' discs for 'bottom drive only', others suggesting that 'DD-DS' discs should be used. I understand it is something to do with 'tracks' on the discs but I am really none the wiser. I have tried some of the more expensive ones and have found that so far they have not failed but £4.00 or so per disc is rather daunting. I would appreciate your help, particularly with the abbreviations 'D', 'DD' etc.

Simon Archer

8000 Plus: *How very strange. Amsoft discs are very respectable; they're the ones that we use here in the office on both models of PCW and very happy service they've rendered too. You can, however, buy any kind of discs just so long as you format them correctly, before you begin using them, for use on either an A drive (Single Density) or, in your case, B drive (Double Density). This you do using DISCKIT on your CP/M master disc that is supplied with your PCW. There's certainly no need to go out of your way to buy more expensive discs just because some suppliers say they are 'special' B drive discs.*

Bridging the gap

Your correspondent Thomas Beven and you are at cross purposes over his letter in the September issue. He asks for a program to work out match pointed pairs at Bridge. You reply giving some programs which purport to teach how to play Bridge. These are not considered very helpful by most bridge players.

As far as I know, there are no commercially produced programs to work out match pointed pairs for the PCW. The English Bridge Union recommends a program by Stephen Brown (his contact number is 0865 881185). I have used this program for some time. It is not very user friendly, but kind enough when you get to know it. It is very flexible and will cope with all the single section movements a Bridge Club is likely to require. My only quarrel with it is that when using two parallel sections it is only big enough to deal with two 10 table sections. This applies in spite of the fact that I have a doubly expanded memory on my PVW 8256 giving 880k memory.

G F Dixon, Southport

8000 Plus: *The program you're referring to is called SCB Bridge Scoring and is fully operational on both 8000 and 9512 PCW models. Mr Brown can be contacted at 52 Dovehouse Close, Eynsham, Oxford OX8 1EX.*

Catch the training

As a disabled person I would like to find someone locally who could help me with the basics of computing. I have a PCW8256 with LocoScript II and LocoSpell and LocoFile + 512k Ram pack and reasonably intelligent (5 credits towards 6 for BAOU) but, of course, my age (63) means that most of my life was computer language 'free' and now I am suffering this drawback.

E J Vincent, Poole, Dorset

8000 Plus: *Computer Training Centres UK Ltd, headed by Susan and David Rogers, are based in Bournemouth – a mere stone's throw away from you – and will deliver mobile Loco training (and virtually any other kind of PCW software training you care to mention) straight to your door. Have a chat to either Sue or David on 0202 299676. I'm sure they can help.*

High dudgeon

To boost 8000's profits even further, may I – yes I will – suggest that a coated paper of equivalent quality but MATT should be used for the general run of the magazine so that people like me who sit on the beach reading can do so in comfort without the glare of glossy paper. What is this ridiculous convention of using gloss at every opportunity? And what is this other ridiculous convention of trying to get impact by printing text, colour on colour, when it does exactly the opposite by infuriating the reader – especially if he/she happens to be reading in adverse lighting conditions? Please take your time to consider these points – implementation before Christmas will be satisfactory.

D A Head, Camborne, Cornwall

8000 Plus: *Ahhh, it must be tough. For the one and a half days each year in which you can comfortably sit on the beach in Cornwall sipping iced tea and absorbing, by a slow process of osmosis, our various pearls of wisdom, you must surely be content, for the remaining 363 1/2 days of the year to read a magazine which is printed on a far superior kind of paper to the loo roll variety you are describing. You shouldn't be reading in adverse lighting conditions; didn't anybody ever tell you? It can damage your eyes.*

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Competition

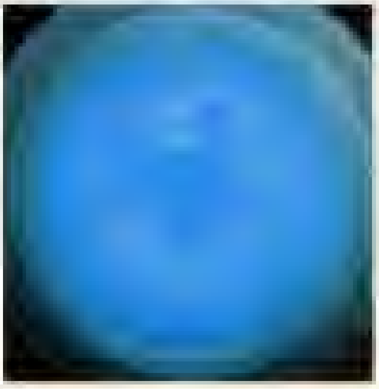
If you've got the yearn to learn, identify the object below and two educational packages could be yours

We were so impressed with the new range of educational software from David Greenhough Computing (reviewed last month and again on pages 58 and 59 of this issue) that we've decided, with their co-operation, to give not three, but five, packs of DGC goodies to the winners of this month's competition.

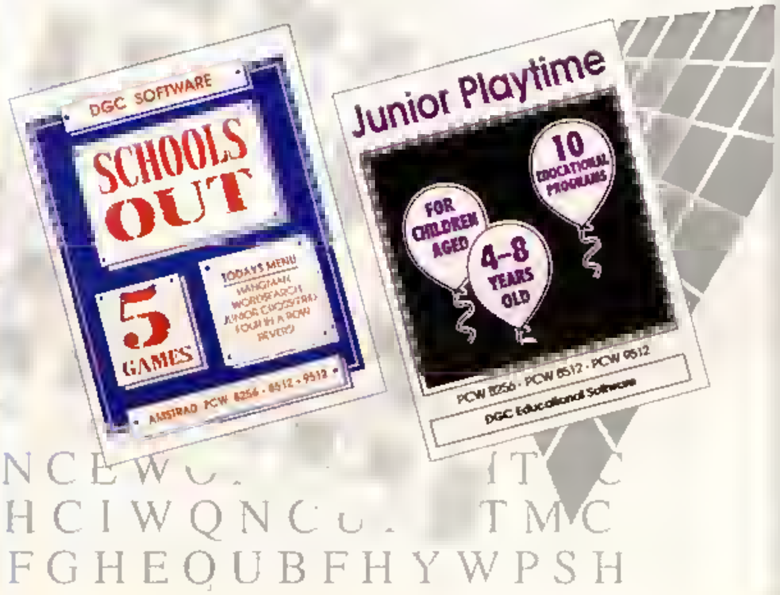
Each pack will consist of a copy of Junior Playtime, a compilation of ten educational games for four to eight-year-olds, and School's Out, another anthology of puzzles and mindbenders for eight to 14-year-olds. Both packages are well designed, with innovative graphics, and, that sure sign of good quality educational software, a highly addictive nature. DGC really have hit upon the correct formula with these two packages and have mastered the art of transforming the learning process into an enjoyable pastime.

But that's not to say that if your school days are in the dim and distant past you won't enjoy DGC's software as well. Some members of the 8000 Plus team, who shall remain nameless (in return for a moderate sum of money), have recently been spied actively enjoying themselves – for whole afternoons at a time, no less – in the name of 'detailed research' for these reviews.

So if you fancy a spot of Othello, a quick burst of Hangman or a more sedate stroll through a word search, get your specs on and tell us exactly what this PCW-related object is, photographed, as you can see, from very close quarters. All answers on the back of a postcard, please, to Close-up Competition, 8000 Plus, 30 Monmouth Street, Bath BA1 2BW. All your entries should be in by Wednesday, 24th October. The usual rules apply: No sealed envelopes (think of our poor fingers), no multiple entries (we always know who you are) and, last but not least, the decision of the judges is final!



DGC's excellent educational software for the eight to 14-year olds; a copy could be yours if you can identify the object above



NEXT MONTH!

Micro Design 2

In the second of our Micro Design tutorial series, we will be continuing with our focus on the requirements of the small business owner, and showing him or her how to go about adding that professional look to the paperwork leaving the office every day. Next month, we will be concentrating on how to produce matching letterheads and business cards.

Sprinter

Would you like to be able to double the operating speed of all your PCW software? Well, the good news is that Cirtech, developers of the add-on hard disc reviewed earlier on in this issue, have just brought out a PCW accelerator pack in the form of another add-on which simply slots on to the expansion port at the back of the machine. The Sprinter, say its manufacturers, can double the operational speed of the PCW, thanks to a microprocessor chip which functions at two and a half times the speed of the PCW's native one. So if the time has come for you to really put your foot down and move up a gear or two, don't miss next month's review of Cirtech's new Sprinter.

LocoScript 2 Surgery

Next month, Liz Bruce will be handling all your special printer enquiries – and there's a fair few of them, if your letters are anything to go by. So, if you'd like to find out more about how you can go about printing successfully on letter-headed stationery (without inadvertently obliterating anything important, say), and numerous other ways to make your printer more obedient, don't miss next month's special surgery.

Protext File

Continuing our step-by-step guide to how to get the best out of the 'alternative' PCW word processor, we take a look at how to master layout in Protext. So, if you want to get to grips with tabs, ruler lines and stored layouts, home straight in on next month's teach-in.

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Our affiliate publishing company, Paperback Software, publishes a range of software suitable for the PCW user, and don't forget, NewWord and Cracker users can upgrade to MSDOS and CDOS systems, taking all data and experience with them.

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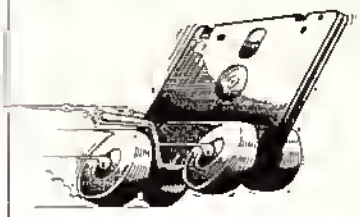

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